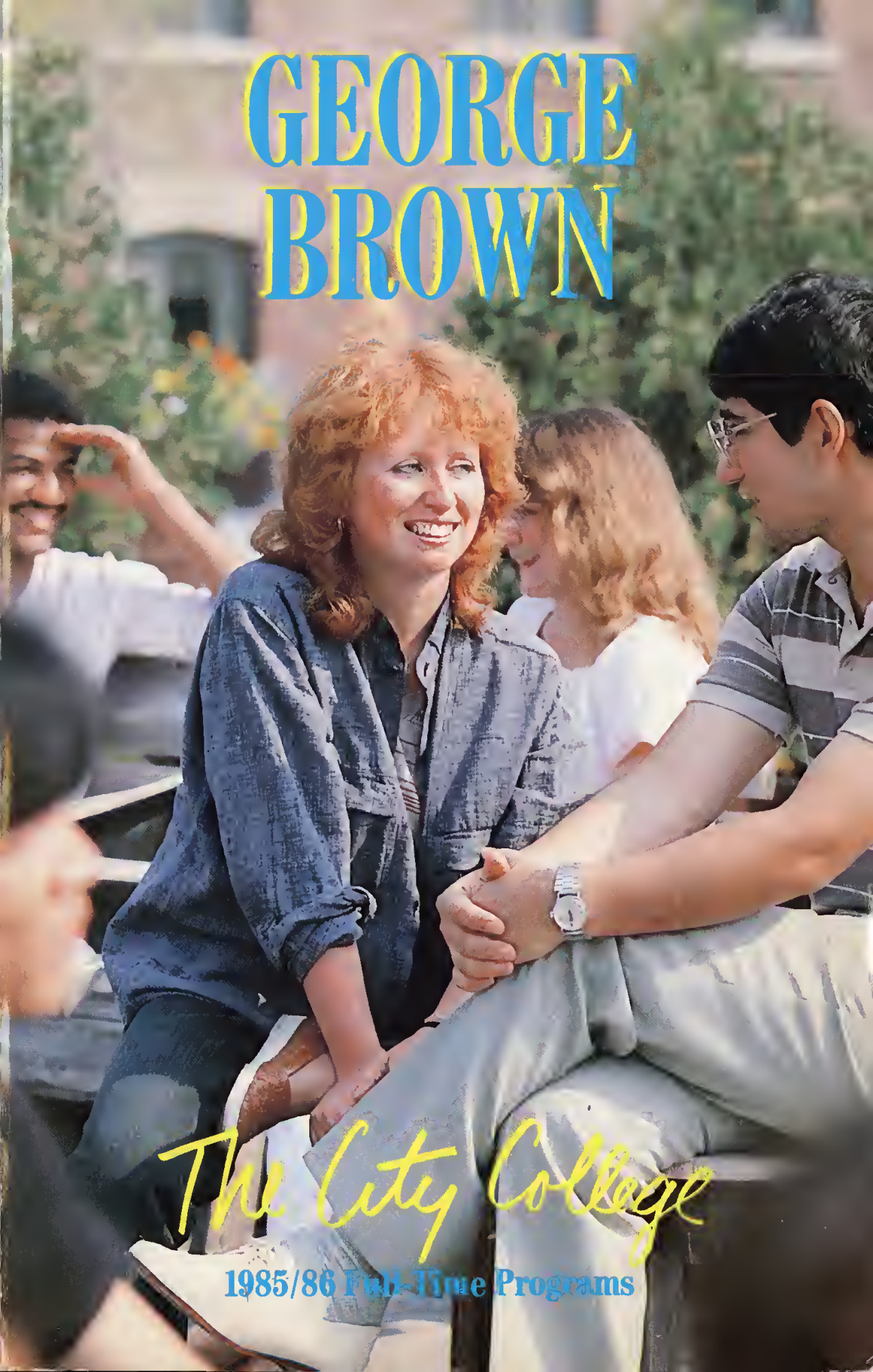
GEORGE BROWN



The City College

1985/86 Full-Time Programs

Cover Photo: Students at St. James Campus roof garden

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George Brown

The City College

1985/86 Full-Time Programs

(416) 967-1212
All departments are connected to this central number.
For general information, ask for Information Services.

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Dean: Dr. Robert B. Gwilliam
Chairmen: Jack Hague, Dr. Shirley Holloway

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Business 50

Business General — Accounting/Data Processing/Marketing/General; Physical Distribution; Business Administration — Accounting/Data Processing/ Marketing; Property Management; Business Diploma — Insurance; Retail Management; Business Accounting; Court Reporting — Machine Shorthand/Stenomask; Computer Programmer; Microcomputer Operator; Computer Literacy — Business and Industry; Sales; Small Business Administration (Post Basic); Office Systems Administration; Secretarial Arts — General/Legal/Medical/Word Processing; Word Processing Operator; Word Processing — Legal; Executive Receptionist; Commercial Refresher.

Community Services 90

Child Care Worker; Addiction Counsellor; Early Childhood Education; Community Worker; Activation Co-Ordinator; Nursery Aide; Health Care Aide.

Electro-Mechanical Technology 102

Electrical Engineering Technician — Design; Electrical Engineering Technician/Technology; Electronics Engineering Technician/Technology; Electronics — Basic Skills/Audio Equipment and Systems/Digital Equipment and Systems/Radio, Hi-Fi and TV Servicing/Video Tape Recorder/Office Systems Servicing; Business Equipment Servicing; Instrumentation Engineering Technician — Industrial; Instrumentation Engineering Technology — Industrial; Instrumentation Mechanic; Instrumentation Mechanic — EST Modular; Electro-Mechanical Technician — Drafting/Toolmaking; Machine Shop; Industrial Electronic Controls; Industrial Electronic Controls — Journeyman; Energy Conversion Technology — Solar-Bio-mass; Welding Specialist; Fitter Welder; Welding Operator; Welding Fitter; Welding Fitter Refresher.

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Creative Fashion Design; Apparel Manufacturing Management; Fur, Leather, Suede; Apparel Pattern Drafting; Industrial Power Sewing; Industrial Power Sewing Machine Mechanic; Furniture Production and Design; Furniture — Woodworking and Finishing; Furniture Upholstery (Repair); Jewellery Arts; Jewellery Repairs; Engraving; Gem Setting; Watchmaking; Clockmaking; Commercial Ceramics.

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Hospitality 198

Culinary Management; Food and Beverage Management; Hotel Management; Chef Training – Pre-Employment; Food Preparation – General/Basic General Advanced; Chinese Cooking – Basic/Advanced; Baking Techniques; Food Service and Bartending; Hotel Front Office and Reception; Bartending; Retail Meat Cutting.

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English as a Second Language; Literacy in English as a Second Language; English for Science and High Technology; Straight Truck Driver; Tractor-Trailer Driver.

George Brown and Toronto have been growing together for 16 years.

The College was created in 1968 as the City's official community college, and was named after one of Toronto's most famous citizens of the last century. George Brown (1819 - 1880) was a Father of Confederation and founder of the Globe newspaper — forerunner of today's Globe and Mail.

Since its first day, the College has grown both in student enrolment and the variety of programs it offers.

Today, George Brown has 150 programs in technology, business, health, hospitality and applied arts, and a faculty of 700.

Throughout its rapid expansion, the College has maintained one goal — to provide high quality, job-oriented education that benefits both its students and the community.

Our location in the heart of Toronto adds an extra dimension to student life — both on and off campus.

In the classroom, students benefit from the advice we get from our downtown neighbours — the leaders in their fields. Their advice helps us ensure that our programs are up-to-date and meet the needs of industry.

The city also gives our students the chance to join the working world before graduation. Many programs include on-the-job training, and opportunities for part-time and summer work are plentiful.

Out of class, George Brown students have the run of the city. Restaurants, movies, fashion, sports, art and theatre all flourish in the streets around our campuses.

Toronto offers an exceptional variety of social, recreational and cultural experiences that make college a time of personal growth.

CAMPUSES

It is hard to tell that George Brown is one of the largest colleges in Ontario. That's because College activity is divided between 13 locations in downtown Toronto. There are five main campuses, each reflecting a different aspect of the city.

CASA LOMA

Our largest campus is across the street from the Toronto landmark of the same name built by Sir Henry Pellatt early in this century. Its five buildings house most of our technology and trade programs.

ST. JAMES

This campus is located a few blocks east of the centre of Canadian business — the intersection of King and Bay Streets.

Named after the nearby St. James Cathedral, the main building is of historical interest itself. Built as a bakery in 1874, it has been completely renovated for College use.

KENSINGTON

Fruit and fabric vie for sidewalk space around this campus near the intersection of College and Spadina. Fashion students are just steps away from Spadina Avenue, the traditional centre of clothing manufacturing, and hospitality students are right next door to the Kensington food market with its colour, noise and bargains.

NIGHTINGALE

Students in community service and post-diploma nursing programs are surrounded by the Toronto medical establishment at this campus. Toronto General, The Hospital for Sick Children, Mount Sinai and many other medical and social service institutions are steps away from our building near Queen's Park.

COLLEGE STREET

Located on cosmopolitan College Street, near Bathurst Street this campus is home to the College's language training programs, including a large English as a second language program.

ADMISSION PROCEDURES

GENERAL PUBLIC

For information and application forms write to Information Services, George Brown College, P.O. Box 1015, Station B, Toronto, Ontario M5T 2T9 or call (416) 967-1212 and ask for "information".

SECONDARY SCHOOL STUDENTS

If you plan to apply to George Brown College consult your guidance counsellor in the fall. Your Guidance Office can supply information and application forms. Application forms must be accompanied by **ONE** of the following documents

i) An official transcript of all secondary school marks showing the necessary credits and grades for admission to the desired program.

OR

ii) A statement from the secondary school principal stating that the applicant is expected to obtain the necessary credits and grades for admission to the desired program; this statement must be substantiated by an official transcript of marks when it becomes available.

MATURE APPLICANTS

Applicants, nineteen years of age or older, who do not meet the stated admission requirements will be considered as mature students. Such applicants may be admitted if they appear to possess the capacity and maturity to succeed. Pre-entry testing and/or interview will be required. Applicants applying as mature students must supply proof that they will be at least nineteen years of age before starting their College program.

NOTE: This category is not open to applicants from foreign countries.

ADMISSION REQUIREMENTS

The minimum requirement for admission to any post-secondary (diploma) program is an Ontario Secondary School Graduation Diploma (27 credits), or Ontario Secondary School Diploma or equivalent. Many programs also require standing in particular subject areas or achievement of specific skills. Please consult individual program descriptions for the additional requirements.

APPLICATION PROCESSING DATES

Applications to post secondary (diploma) programs may be submitted after January 1st. Selection procedures may start January 1st. Acceptances will be issued from April 1st. All applications postmarked by February 15th will be treated on an equal basis. Applications received after February 15th will be treated on a 'first-come-first-served' basis.

LIMITED ENROLMENT PROGRAMS

The exact number of seats available in any College program changes from time to time based on College facilities and the policies of the provincial government. The programs which are affected may be different from year to year so information is not published in advance. Each year, the names of limited enrolment programs will be available through the Secondary School Liaison Office and the Admissions Office. Call (416) 967-1212., and ask for Liaison or Admissions.

SELECTION PROCEDURES

For many programs, the number of applicants with basic or minimum requirements for admission far exceeds the number of seats available.

Colleges of Applied Arts and Technology do not admit students solely on the basis of academic achievement (grades) nor do they recognize students having completed additional studies beyond Grade 12, or its equivalent, as having any advantage over those with the minimum criteria.

Therefore, to ensure that individuals have the highest probability of success in the program and are most likely to find employment in the fields and careers for which the program is designed, the College asks applicants to certain programs to take part in an additional process. This "selection" process may involve an interview (either individual or group), a general information exchange session with other applicants and staff, writing various tests, completing a questionnaire or demonstrating specific skills, talents or capabilities, or any combination of these.

Selection procedures may be changed at any time to meet the needs of the College and the applicants. Applicants will receive information about what is expected of them after their applications have been acknowledged. In some cases, the process is step-by-step; applicants may be excluded at any step.

After all selection procedures have been completed and more qualified applicants remain than there are places available, candidates will be selected at random from the remaining applicants until the available seats are filled.

DECISIONS ON ADMISSION

Applications are assessed by the College Registrar's Office which is empowered to accept, defer or reject any candidate's application for admission to any program.

When special selection processes are part of the assessment process, representatives of the Dean of the relevant academic division may also be involved by recommending a decision to the Registrar.

An applicant has the right to appeal any decision regarding an application for admission. Appeals will follow the normal levels of authority commencing with a review of the appeal by the Associate Registrar — Admissions followed by the Board of Admissions which will be constituted by the Registrar when required. The Board will normally comprise the appropriate members of the admissions staff, the academic department concerned and an objective third party. The decision of the Board will be final. Applicants do not have access to other College appeals and review processes until they become registered students.

PRIORITY OF ADMISSIONS

Students will be admitted in the following order of preference:

1. Permanent residents of Ontario;
2. Permanent residents of other Canadian provinces;
3. Overseas students from Commonwealth countries;
4. Students from other foreign countries.

STUDENTS FROM FOREIGN COUNTRIES

Students from foreign countries are eligible for post-secondary programs provided they can demonstrate an academic standing equivalent to Ontario high school graduation, establish proficiency in both spoken and written English, fulfill any selective admission criteria for the program for which application is being made, and obtain permission from the Canadian immigration authorities to remain in the country for the length of the program.

CHANGES TO PUBLISHED INFORMATION

The program descriptions in this calendar are statements of intent on the part of the College which will be carried out as closely as circumstances permit. Policies and procedures were those in effect at the time of publication.

However, the College reserves the right to change, without notice, any published information which may subsequently require correction or amendment due to circumstances beyond its control. Inquirers or applicants will be advised of any such changes.

The College also reserves the right to change or cancel a program or course when enrolment is insufficient or employment opportunities for graduates appear inadequate, and to withdraw offers of acceptance or refund any fees paid for such programs or courses. The College will not be held liable in any material way for difficulties created by any required changes in curricula.

FEES

The annual tuition fee for post-secondary (diploma) programs is $545 for programs of 32 weeks in length and is standard across Ontario. However, each program could have a different fee depending on its actual length and the "weighting" of the program set by the Ministry of Colleges and Universities.

There is also a fixed fee of $65. Of this, $55 is the Student Activity Fee collected on behalf of the Student Councils; the remainder covers locker, athletic, transcripts and graduation expenses.

Fees are payable in two installments, the first by July 15th and the second by November 30th.

The fee for certificate programs is $15.20 per week, payable in 10-week installments.

In addition to the cost of books, supplies and other educational expenses (which vary according to program), some programs require extra expenses from one to several hundred dollars for uniforms, equipment and materials.

Detailed information on fees, payment dates, refunds and registration is available in the Registrar's Office and is issued with registration instructions.

Foreign students on Student Authorizations will pay $4,535 and must pay their fees for the entire academic year by July 15th.

Fees are subject to change without notice, subject to the approval of the Government of Ontario and/or the College Board of Governors.

FINANCIAL ASSISTANCE

Applicants to post-secondary programs who are Canadian citizens or permanent residents, having resided in the country for at least 12 consecutive months prior to enrolment, may be eligible for financial assistance under the terms of the Ontario Student Assistance Program. Canadian residents and permanents residents may also be eligible for assistance under the Canadian Student Loans Plan.

Further information and application forms for student financial assistance are available at all secondary schools and the Student Services Office of George Brown College, (416) 967-1212, Exts. 2281 or 2285.

SERVICES

ACCOMMODATION information is available in the Student Services Office at 500 MacPherson Avenue. There is no shortage of boarding and rooming facilities in Toronto; rates vary from $75 to $125 per week for room and board.

COUNSELLING SERVICES are available on each campus to provide educational, vocational, and personal counselling.

HEALTH CENTRES are staffed by Registered Nurses.

LIBRARIES, providing for study needs and leisure reading, operate on each campus.

CAMPUS PLACEMENT OFFICES provide career planning and employment search information and maintain contact with potential employers on behalf of graduates.

Students are advised of permanent, part-time and summer employment opportunities.

ATHLETIC activities are co-ordinated from the office at the St. James Campus gymnasium. There are also gyms at Casa Loma and Kensington. For information about the programs, call 967-1212, Ext. 3280.

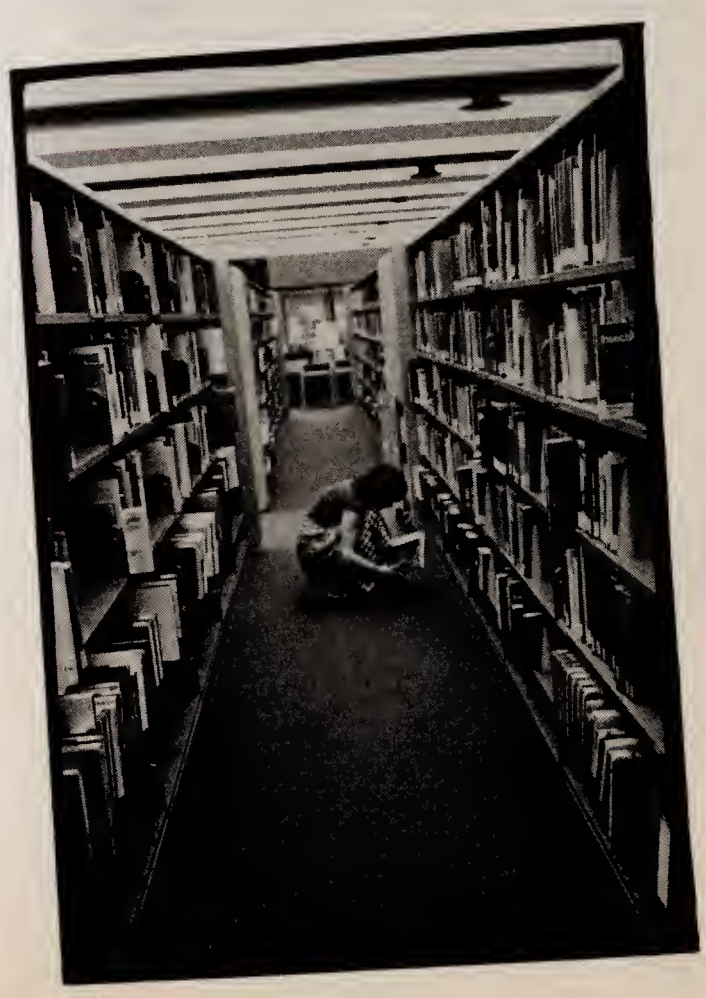
TRANSPORTATION on GO trains is available at reduced rates for full-time students who are at college for more than 12 consecutive weeks and who are not employed full-time. Call (416) 630-3933 for more information. All campuses are easily accessible by the Toronto Transit Commission buses, subways and streetcars. College students are not eligible for any reduction in fares.

BOOKSTORES are located on each campus (with the exception of Nightingale) and are equipped to supply most of the needs of students in all programs at the College.

OHIP (Ontario Hospital Insurance Plan) coverage is the responsibility of each student.

ALL campuses are wheelchair accessible. Hearing Impaired Services such as interpreters and after class tutorials are available.

COLLEGE PREPARATION



HEADSTART FOR THE HEARING IMPAIRED

GBC Code HS500 **Starting:** June
Casa Loma Campus and
St. James Campus
6 Weeks

ABOUT THE PROGRAM: The Headstart Program (6 weeks: 4 weeks in June and the first 2 weeks of July) involves courses in language, communication skills, reading comprehension, mathematics, personal management, life skills and program orientation (which means that the student will have an opportunity to become familiar with educational material related to the program choice). Academic, aptitude and interest tests are administered.

The Headstart Program will help students determine whether they have made the appropriate selection of a vocational goal. Their performance and attitude during Headstart determines whether or not they will be accepted into a regular College program. Headstart allows the students to become familiar with College faculty, support services and staff so that they can benefit during the academic year once they start a regular program.

COURSES:

	6 WEEKS
HST500	Academic, Aptitude and Interest Testing
HST501	Language
HST502	Reading Comprehension
HST503	Communication Skills
HST504	Mathematics
HST505	Life Skills
HST506	College Program Sampling
HST507	Study and Work Habits
HST508	Personal Management (Social/Emotional Maturity)
HST509	Vocational Exploration
HST510	Orientation to Support Services

BASIC TRAINING FOR SKILLS DEVELOPMENT 1

GBC Code AS540 **Starting:** Continuously
Casa Loma Campus and
College Street Campus
24 weeks

ABOUT THE PROGRAM: This program is intended for candidates who require a rudimentary training in mathematics an dEnglish in preparation for continued studies in the upgrading program. According to functional level testing results, students will be required to take some or all of the following courses in this stream.

COURSES:

	24 WEEKS
ENG540	English
MATH540	Mathematics
RSCH501	Research and Survey

BASIC TRAINING FOR SKILLS DEVELOPMENT 2

GBC Code AS541 **Starting:** Continuously
Casa Loma Campus
36 Weeks

ABOUT THE PROGRAM: This program is intended for candidates entering commercial or technical programs. This stream provides an emphasis on English, mathematics or science. According to functional level testing results, students will be required to take some or all of the courses in this program.

Basic Training for Skills Development 3

GBC Code AS542 **Starting:** Continuously
Casa Loma Campus **Certification:** Certificate
and College Street Campus
32 Weeks

PREREQUISITES: Functional level testing.

ABOUT THE PROGRAM: The Basic Training for Skills Development (BTSD) program is designed for adults who wish to upgrade for entrance to skill training programs or to the advanced level of upgrading (AS543) which prepares candidates for post secondary programs. Candidates are admitted on a continuous (weekly) basis. After functional level testing, students in BTSD are placed in an appropriate individualized program. Most students require a thorough review of basic skills in language and mathematics before they are placed in one of three streams. The three streams are academic, commercial and technical.

OPTIONS: Pre-Technical, Pre-Commercial

Basic Training for Skills Development 4

GBC Code AS543 **Starting:** Continuously
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: BTSD Level 3 or Grade 10 or equivalent in mathematics and English.

ABOUT THE PROGRAM: This program is designed to prepare persons for entry into colleges of applied arts and technology programs that require a Grade 12 prerequisite.

Pre-Business

GBC Code AS543 **Starting:** Fall, Winter, Spring
Casa Loma Campus
1 Semesters

PREREQUISITES: BTSD Level 3 or Grade 10 or equivalent in mathematics and English.

ABOUT THE PROGRAM: This program prepares students for entry to post-secondary business programs.

Pre-Technology

GBC Code PT700 **Starting:** September
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Grade 12, but lacking the subjects and level required for prerequisites to enter technology programs. Mature candidates accepted after interview.

ABOUT THE PROGRAM: This program will provide a realistic preparation for mature students and those students not having the stated prerequisites to enter their chosen technology program. By taking this program, the students will be given a general education and introduction to technology that will provide a reasonable expectation of success in a technology program.

COURSES:

SEMESTER 1	15 WEEKS
MATH713	Pre-Technology Mathematics
PRGM713	Computer Studies
CHEM714	Introductory Chemistry
ENG720	English "A" Language Development
HR700	Liberal Studies, Life Skills and Human Relations
EL714	Introductory Electricity
MACH707	Machine Shop Practice
DRAFT703	Drafting

SEMESTER 2	15 WEEKS
MATH714	Pre-Technology Mathematics
PRGM714	Computer Studies
PHY711	Introductory Physics
ENG721	English "B" Applied Communications
HR701	Liberal Studies, Life Skills and Human Relations
SC700	Introduction to Engineering Science
ELTC722	Introductory Electronics
DRAFT704	Drafting

Pre-Health Science

GBC Code PH700 **Starting:** September and January
St. James Campus **Certification:** Certificate
16 Weeks

PREREQUISITES: Ontario Secondary School Graduation Diploma

ABOUT THE PROGRAM: The Pre-Health Science Program has been established for people who want to enter a post-secondary health science program but who do not have all the prerequisite admissions requirements. It has been designed to offer necessary background in English, mathematics, social sciences and basic sciences.

Graduates of the program who wish to enter full-time programs in the Health Sciences Division must apply through the normal selections process.

COURSES:

	16 WEEKS
ENG700	Language and Communications
MATH700	Mathematics for Health Sciences
PHY700	Physics for Health Sciences
CHEM700	Chemistry for Health Sciences
BIO700	Biology for Health Sciences
SOC700	Introduction to the Social Sciences
HR700	Human Relations

WOMEN INTO TRADES AND TECHNOLOGY

GBC Code AR565 **Starting:** June, October and February
Casa Loma Campus **Certification:** Training Profile Issued
18 Weeks

PREREQUISITES: Functional level test prior to interview with program staff.

ABOUT THE PROGRAM: This program in trades and technology is designed to provide women, who have not previously had the chance to work with hand and power tools, the opportunity to try out and gradually develop skills in several trade areas and includes computer literacy and basic programming. The practical hands-on method of learning is emphasized and the student is encouraged to learn a logical approach to mechanical and electrical problem-solving which is essential in most trade areas. The student is also exposed to trade-related academic subjects including Basic Blueprint Reading, Technical English and Mathematics. This combination of shop and academic instruction gives the student the "catch up" skills and self-confidence needed to continue in a non-traditional career path.

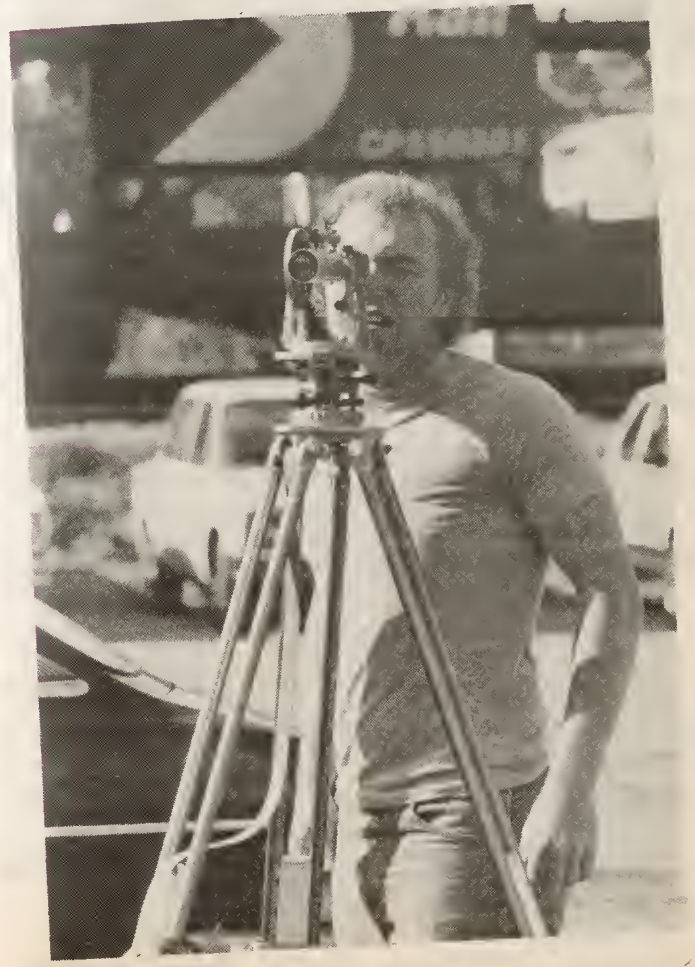
CAREER PROSPECTS: These are wide open depending on the desires of the student.

Graduates from the program have gone on to train in such fields as, Computer Assisted Design and Manufacturing, Aircraft Maintenance Technician, Refrigeration and Air Conditioning and major Appliance Servicing, Electronics, Drafting, Truck Driving, General Carpentry, Welding, Cabinet Making, Machinist, Masonry, or gone on to university.

COURSES:

18 WEEKS	
BPR565	Blueprint Reading
ENG565	Industrial Communications
FIT565	Trade Theory
MATH568	Mathematics
SUR565	Survival Skills in NTO
TTP565	Trade Practice

ARCHITECTURAL TECHNOLOGY



AIR CONDITIONING, REFRIGERATION ENGINEERING TECHNICIAN

GBC Code AR101 **Starting:** September and January
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in years 3 and 4 in English, mathematics, and physics at or above the general level, or equivalent.

ABOUT THE PROGRAM: During the last decade, air conditioning has developed into one of Canada's fastest growing industries. By pioneering specialized systems that heat, cool, humidify, circulate, filter and purify, it has contributed to achievements ranging from space travel to solar heating.

The student will gain a broad and intensive knowledge of the design, installation and operation of air conditioning systems in residential, commercial and industrial buildings. Well equipped laboratories are provided to reinforce the practical aspects of the subject matter.

CAREER PROSPECTS:

System Design—The technician works with a professional engineer in calculating heat loads; in sizing piping, ducting and other equipment; in planning site layouts and preparing drawings.

Sales Promotion—The technician prepares estimates and drawings so that competitive quotations may be given and gives technical support to sales staff in answering engineering queries.

System Balancing—The technician plans and recommends, or carries out, adjustment to air distribution, air quantities and velocities in order to maintain air supplies at recommended design conditions.

Estimating—The technician investigates new construction contracts to determine how an employer's product may best be employed. Material and cost lists are prepared which demand a specialized heating, ventilating, and air conditioning (HVAC) knowledge.

COURSES:

SEMESTER 1	15 WEEKS
AIR111	Refrigeration Theory
AIR112	Heat Load Calculation
AIR113	Electrical Fundamentals
ARDR125	Drafting
AIR114	Laboratory Applications
MATH106	Mathematics
PHY106	Applied Physics

SEMESTER 2	19 WEEKS
HT105	Fuels Technology
AIR115	HVAC System Design
AIR116	Electrical Circuit Analysis
ARDR126	Drafting
AIR117	Instrumentation
MATH107	Mathematics
PHY116	Applied Physics
ENG100	Language and Communications

SEMESTER 3	15 WEEKS
HT205	Fuels Technology
AIR205	HVAC System Design
AIR206	System Control
ARDR225	Drafting
MATH122	Applied Computer Programming
MATH206	Mathematics
PHY206	Applied Physics
ENG263	Language and Communications

SEMESTER 4	19 WEEKS
AIR207	Refrigeration Theory
AIR208	HVAC System Design
AIR209	System Control
ARDR226	Drafting
AIR210	Laboratory Applications
AIR211	Estimating
MATH207	Mathematics
PHY207	Applied Physics
ENG264	Language and Communications

AIR CONDITIONING, REFRIGERATION ENGINEERING TECHNOLOGY

GBC Code AR120 **Starting:** September and January
Casa Loma Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in years 3 and 4 in English, mathematics, and physics at or above the general level, or equivalent.

ABOUT THE PROGRAM: The introduction of high technology into the heating, ventilating, and air conditioning (HVAC) field is proceeding at an accelerating rate. New opportunities are now arising in organizations for people with training beyond the two-year technician level.

This program is intended to supplement the knowledge gained as technician and to expand on those specialized areas for which industry is demanding higher levels of expertise, notably, at a "junior engineer" or "technologist" level.

CAREER PROSPECTS: In addition to those offered at technician level:

System Design—Under the direction of an engineer the technologist will use the latest techniques in computer aided design programs for heating, ventilating, and air conditioning (HVAC) systems, in estimating, sizing and equipment selection practices.

System Commissioning—The technologist checks all aspects of a complete HVAC system on "start-up" and carries out any control settings and balancing adjustments necessary to maintain correct distribution of conditioned air.

Project Coordinator—The technologist is the liaison between the engineering design team and site mechanics to ensure installation of equipment proceeds according to design requirements.

Building Management (Mechanical)—The technologist may direct other staff to ensure that all mechanical systems function in good order in a group of buildings — such as a high-rise apartment complex.

Testing and Research—The technologist is employed by organizations such as the Canadian Standards Association or the Canadian Gas Association, testing equipment, and recommending improvements, before marketing permission is given.

Automatic Controls—The technologist is a team member in a controls manufacturing company, and is responsible for design, quality control and marketing of HVAC control systems which often emphasize digital and microprocessor systems.

COURSES:

SEMESTER 1	15 WEEKS
AIR111	Refrigeration Theory
AIR112	Heat Load Calculation
AIR113	Electrical Fundamentals
ARDR125	Drafting
AIR114	Laboratory Applications
MATH106	Mathematics
PHY106	Applied Physics

SEMESTER 2	19 WEEKS
HT105	Fuels Technology
AIR115	HVAC System Design
AIR116	Electrical Circuit Analysis
ARDR126	Drafting
AIR117	Instrumentation
MATH107	Mathematics
PHY116	Applied Physics
ENG100	Language and Communications

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SEMESTER 3	15 WEEKS
HT205	Fuels Technology
AIR205	HVAC System Design
AIR206	System Control
ARDR225	Drafting
MATH122	Applied Computer Programming
MATH206	Mathematics
PHY206	Applied Physics
ENG263	Language and Communications

SEMESTER 4	19 WEEKS
AIR207	Refrigeration Theory
AIR208	HVAC System Design
AIR209	System Control
ARDR226	Drafting
AIR210	Laboratory Applications
AIR211	Estimating
MATH207	Mathematics
PHY207	Applied Physics
ENG264	Language and Communications

SEMESTER 5	15 WEEKS
AIR300	Refrigeration Theory
AIR301	HVAC System Design
AIR302	System Control
AIR303	Energy Management
AIR304	Laboratory Applications
AIR305	Multiple Occupancy System Layout
AIR306	Computer Applications
MATH301	Mathematics
ENG310	Language and Communications

SEMESTER 6	19 WEEKS
AIR307	Heat Pump System Design
AIR308	HVAC System Design
AIR309	System Control
AIR310	Energy Economics
AIR311	Energy Options in HVAC Systems
AIR312	HVAC Fire Protection Systems
AIR313	Computer Applications
MATH320	Digital Computations
ENG320	Technical Report

CONSTRUCTION ENGINEERING TECHNICIAN–MANAGEMENT

GBC Code AR103 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in years 3 and 4 at, or above, the general level, or equivalent.

BACKGROUND: Credits in physics, drafting and bookkeeping would be useful.

ABOUT THE PROGRAM: The two-year Construction Technician Program prepares the student to enter the construction industry in various capacities leading to positions such as estimators, expeditors, field engineers and superintendents, building inspectors, building product sales and others.

Instructors use the project approach to learning to reinforce the theoretical and practical parts of the program. In this way, the student is made familiar with industry's methods of working. Well equipped laboratories are available for the testing and quality control of various construction materials and components.

CAREER PROSPECTS: The construction industry is one of Canada's largest employers and offers a variety of jobs for the graduate construction technician. Positions may be found in a general or subcontractor's office or in a firm specializing in other forms of construction management such as quantity surveying, or in sales.

COURSES:

SEMESTER 1	15 WEEKS
CO100	Construction Methods and Drafting
CO101	Quantity Surveying
CO102	Mechanical Installations
CO103	Construction Materials
CO104	Site Engineering
MATH100	Mathematics
ENG141	Language and Communications I
MECH100	Mechanics

SEMESTER 2	19 WEEKS
CO100	Construction Methods and Drafting
CO101	Quantity Surveying
CO102	Mechanical Installations
CO103	Construction Materials
MATH100	Mathematics
ENG182	Language and Communications II
MECH110	Mechanics of Materials

SEMESTER 3	15 WEEKS
CO216	Site Engineering
CO200	Building Construction
CO201	Quantity Surveying
CO202	Mechanical Installations
CO210	Contracts and Specifications
MATH200	Mathematics
ENG263	Language and Communications
EC100	Economics
PHY234	Applied Physics

SEMESTER 4	19 WEEKS
CO200	Building Construction
CO201	Quantity Surveying
CO202	Mechanical Installations
CO210	Contracts and Specifications
MATH200	Mathematics
ENG264	Language and Communications
EC100	Economics
PHY244	Applied Physics

Construction Engineering Technology

GBC Code AR117 **Starting:** September
Casa Loma Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in years 3 and 4 at, or above, the general level, or equivalent.

BACKGROUND: Credits in physics, drafting and bookkeeping would be useful.

ABOUT THE PROGRAM: The graduate construction engineering technologist will find employment in the various areas of the construction industry. The concentration of quality surveying courses plus the inclusion of technical and related courses will provide a base for successful advancement within a variety of positions.

Instructors use the project approach to learning to reinforce the theoretical and practical parts of the program. In this way, the student is made familiar with industry's methods of working. Well-equpped laboratories are available for the testing and quality control of various construction materials and components.

CAREER PROSPECTS: The construction industry is one of Canada's largest employers and offers a variety of jobs for the graduate construction technologist. Positions may be found in a general or subcontractor's office or in a firm specializing in other forms of construction management such as quantity surveying, or in sales.

COURSES:

SEMESTER 1	15 WEEKS
CO100	Construction Methods and Drafting
CO101	Quantity Surveying
CO102	Mechanical Installations
CO103	Construction Materials
CO104	Site Engineering
MATH100	Mathematics
MECH100	Mechanics
ENG141	Language and Communications I

SEMESTER 2	19 WEEKS
CO100	Construction Methods and Drafting
CO101	Quantity Surveying
CO102	Mechanical Installations
CO103	Construction Materials
MATH100	Mathematics
MECH110	Mechanics of Materials
ENG182	Language and Communications II

SEMESTER 3	15 WEEKS
CO200	Building Construction
CO201	Quantity Surveying
CO202	Mechanical Installations
CO210	Contracts and Specifications
CO216	Site Engineering
MATH200	Mathematics
EC100	Economics
ENG263	Language and Communications
PHY234	Applied Physics

SEMESTER 4	19 WEEKS
CO200	Building Construction
CO201	Quantity Surveying
CO202	Mechanical Installations
CO210	Contracts and Specifications
MATH200	Mathematics
ENG264	Language and Communications
PHY244	Applied Physics

SEMESTER 5	15 WEEKS
CO301	Construction Methods and Equipment
CO302	Quantity Surveying and Estimating
CO303	Electrical Installations
CO304	Construction Management
CO307	Building Services Estimating
CO203	Structural Design—Concrete
MATH303	Applied Statistics
ENG310	Language and Communications
LAW300	Construction Law

SEMESTER 6	19 WEEKS
CO301	Construction Methods and Equipment
CO302	Quantity Surveying and Estimating
CO304	Construction Management
CO308	Building Services Estimating
CO306	Building Economics
CO204	Structural Design—Steel
MATH303	Applied Statistics
ENG320	Technical Report
LAW300	Construction Law

Residential Construction Management

GBC Code AR121 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent. All applicants are interviewed before acceptance.

ABOUT THE PROGRAM: Residential construction is a field that significantly differs from general construction. In close consultation with the Canadian Home Builders' Association, George Brown College has developed a program that is weighted heavily in the areas of business organization and management, with a considerable portion of school time spent in the technical area. In addition, during May, June, July and August, the student will be employed in a real work situation. The employer will be asked to submit to the College an assessment of the student's performance on the job.

CAREER PROSPECTS: Graduates can expect to be hired as an Assistant Job Site Superintendent or site clerk on a construction site.

COURSES:

SEMESTER 1	15 WEEKS
ARDR100	BPR Drafting and Codes
CO110	Building Construction
CO111	Materials of Construction
CO112	Contracts, Specifications and Codes
EDP100	Introduction to Computer Programming
BUS107	Small Business Management
MARK103	Introduction to Marketing Management
MATH138	Mathematics

SEMESTER 2	17 WEEKS
ARDR101	Architectural Drafting and Codes
CO110	Building Construction
CO111	Materials of Construction
CO113	Mechanics and Timber Design
MARK104	Salesmanship
ARCH109	Job Site Management I
ENG102	Language and Communications
MATH138	Mathematics

SEMESTER 3	15 WEEKS
CO211	Construction Project Scheduling
CO212	Building Construction
SURV103	Quantity Surveying & Estimating
ARDR200	Design & Planning
SURV207	Plane Surveying
PSY211	Human Resources Development
BUS216	Business-Government Relations
BUS217	Purchasing & Inventory Control
CO105	Safety
CO106	First Aid
PRAC211	Management Practice (Co-Op)

SEMESTER 4	17 WEEKS
ARDR201	Final Design Project
SURV205	Quantity Surveying & Estimating
CO213	Mechanical-Electrical Services —Electrical
CO214	Mechanical-Electrical Services —Plumbing
CO215	Mechanical-Electrical Services —Heating
BUS202	Promotional Management I— Marketing
BUS203	Promotional Management II— Public Relations
BUS221	Financial Management

Civil Engineering Technician

GBC Code AR110 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in years 3 and 4 at, or above, the general level, or equivalent.

BACKGROUND: Credits in physics, drafting and surveying are desirable.

ABOUT THE PROGRAM: The two-year Civil Engineering Program prepares the student to seek a career in the design, planning or construction of civil engineering projects.

During the instruction periods, particularly in the technical subjects, the instructors use the project approach to reinforce the theoretical and practical aspects of engineering. This method and control of the major construction materials helps to familiarize the student with industry's approach to the subject area.

Well-equipped laboratories are available for the testing and quality control of various construction materials and components.

CAREER PROSPECTS: The graduate civil engineering technician may find employment in structural engineering, municipal, government and contracting offices as a member of the engineering team covering design, site engineering, site surveying and supervision, quality control and estimating, or as a laboratory technician.

COURSES:

SEMESTER 1	15 WEEKS
SURV111	Plane Surveying
CIV110	Reinforced Concrete Drawing and Design
CIV111	Structural Steel Drawing and Design
CIV112	Construction Materials
CIV113	Specifications and Estimating
ENG141	Language and Communications I
MATH100	Mathematics
MECH100	Mechanics

SEMESTER 2	19 WEEKS
SURV121	Plane Surveying
CIV120	Reinforced Concrete Drawing and Design
CIV121	Structural Steel Drawing and Design
CIV122	Construction Materials
CIV123	Specifications and Estimating
ENG182	Language and Communications II
MATH100	Mathematics
MECH110	Mechanics of Materials

SEMESTER 3	15 WEEKS
SURV211	Advanced Plane Surveying
CIV210	Reinforced Concrete Drawing and Design
CIV211	Municipal Services
CIV212	Highway Technology
CIV213	Specifications and Estimating
ENG263	Language and Communications
MATH120	Applied Computer Programming
MATH200	Mathematics
PHY234	Applied Physics

SEMESTER 4	19 WEEKS
SURV221	Advanced Plane Surveying
CIV220	Structural Steel Drawing and Design
CIV221	Municipal Services
CIV222	Highway Technology
CIV223	Specifications and Estimating
ENG264	Language and Communications
MATH120	Applied Computer Programming
MATH200	Mathematics
PHY244	Applied Physics

Civil Engineering Technology

GBC Code AR116 **Starting:** September
Casa Loma Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in years 3 and 4, at, or above, the general level, or equivalent.

BACKGROUND: Credits in physics, drafting and surveying would be useful.

ABOUT THE PROGRAM: The three-year Civil Engineering Technology Program prepares the student to seek a career in the design, planning and construction of civil engineering projects.

The curriculum followed by the engineering technologist is based upon a core of applied science and mathematics as well as engineering applicable to civil technology.

The broad base in Civil Engineering subjects is required to give the student maximum opportunity for employment in a changing market, and encourage a more mature judgment in his/her work as an engineering technologist.

CAREER PROSPECTS: The graduate civil engineering technologist may find employment in municipal engineering, transportation engineering, structural engineering, or construction management working either in the field or in the office as designer, site supervisor, site surveyor, quality control inspector, lab technician, or estimator.

COURSES:

SEMESTER 1	15 WEEKS
SURV111	Plane Surveying
CIV110	Reinforced Concrete Drawing and Design
CIV111	Structural Steel Drawing and Design
CIV112	Construction Materials
CIV113	Specifications and Estimating
ENG141	Language and Communications I
MATH100	Mathematics
MECH100	Mechanics

SEMESTER 2	19 WEEKS
SURV121	Plane Surveying
CIV120	Reinforced Concrete Drawing and Design
CIV121	Structural Steel Drawing and Design
CIV122	Construction Materials
CIV123	Specifications and Estimating
ENG182	Language and Communications II
MATH100	Mathematics
MECH110	Mechanics of Materials

SEMESTER 3	15 WEEKS
SURV211	Advanced Plane Surveying
CIV210	Reinforced Concrete Drawing and Design
CIV211	Municipal Services
CIV212	Highway Technology
CIV213	Specifications and Estimating
ENG263	Language and Communications
MATH120	Applied Computer Programming
MATH200	Mathematics
PHY234	Applied Physics

SEMESTER 4	19 WEEKS
SURV221	Advanced Plane Surveying
CIV220	Structural Steel Drawing and Design
CIV221	Municipal Services
CIV222	Highway Technology
CIV223	Specifications and Estimating
ENG264	Language and Communications
MATH120	Applied Computer Programming
MATH200	Mathematics
PHY244	Applied Physics

SEMESTER 5	15 WEEKS
CIV303	Highway Technology
CIV310	Reinforced Concrete Design
CIV311	Structural Steel Design
CIV312	Municipal Engineering Planning
CIV314	Soils Mechanics and Foundations
CIV315	Construction Management
ENG310	Language and Communications
MATH320	Digital Computations
MECH310	Mechanics of Fluids

SEMESTER 6	19 WEEKS
CIV320	Reinforced Concrete Design
CIV321	Structural Steel Design
CIV322	Sanitary Technology
CIV323	Transportation Planning
CIV324	Soils Mechanics and Foundations
CIV325	Construction Management
ENG320	Technical Report
MATH330	Digital Computations
MECH320	Theory of Structures

MECHANICAL ENGINEERING TECHNICIAN–TOOL DESIGN

GBC Code AR111 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in years 3 and 4 at, or above, the general level, or equivalent.

BACKGROUND: Credits in drafting and machine shop practice would be advantageous.

ABOUT THE PROGRAM: The tool and die design technician works in the drawing and design offices of manufacturing companies. The tool designer helps decide the various ways products are to be manufactured, develops the manufacturing sequence and decides what tooling is needed to make each part, and creates the designs for special tools such as jigs, fixtures and dies which play a vital role in modern manufacturing practice.

This two-year program is divided into four semesters which cover the theoretical and practical aspects of tool design. The student will be stationed at one of the design tables in our design office. This practical approach is the same as would be encountered in industry. The well-equipped design office and library, give the student a realistic environment in which to develop skills. An up-to-date machine shop is available to test the practicality of designs developed in the design office.

CAREER PROSPECTS:

Tool Designer—The technician is capable of working in a drawing office. The work area could encompass jig and fixture design, die design, and special machine design, as part of the design team with designers, engineers and production personnel.

Technical Sales—Knowledge of machine tools, types of steel, methods of production and tool design enables the technician to be sales representative for an industrial company.

Estimator-Planner—This position involves working with production personnel to determine the exact production procedures, location of production facilities, and cost of manufacture.

COURSES:

SEMESTER 1	15 WEEKS
ENDR120	Descriptive Geometry I
ENDR158	Technical Drawing
MATH 100	Mathematics
ENG141	Language and Communications I
MECH129	Mechanics
MET100	Metallurgy
MACH110	Manufacturing Technology

SEMESTER 2	19 WEEKS
ENDR121	Descriptive Geometry II
ENDR130	Jig and Fixture Design
MATH100	Mathematics
MECH139	Mechanics
ENG182	Language and Communications II
MET100	Metallurgy
MACH110	Manufacturing Technology

SEMESTER 3	15 WEEKS
ENDR140	Die Design I
ENDR220	Kinematics I
TD100	Metrology
MATH200	Mathematics
MECH229	Mechanics of Materials
ENG264	Language and Communications
ENDR226	Descriptive Geometry III
ENDR202	Manufacturing Processes

SEMESTER 4	19 WEEKS
ENDR244	Die Design II
ENDR221	Kinematics II
EL305	Electrical Fundamentals and Drawing
MATH200	Mathematics
MECH239	Mechanics of Materials
ENG263	Language and Communications
ENDR227	Descriptive Geometry IV
MATH210	Applied Computer Programming I

MECHANICAL ENGINEERING TECHNICIAN–MACHINE DESIGN

GBC Code AR112 **Starting:** September and January
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in years 3 and 4 at, or above, the general level, or equivalent.

BACKGROUND: Credits in drafting and physics are desirable.

ABOUT THE PROGRAM: This program has been developed to prepare the student for a career in a wide range of drafting and design areas.

The theoretical and practical aspects of the subject matter are applied to the drawing and design of projects in a modern drafting room, using up-to-date equipment which simulates an actual industrial engineering office.

CAREER PROSPECTS:

Drawings and Specifications—The technician's training provides the background and the skills to develop layout drawings, expand basic design sketches, to make appropriate working drawings, and to list the necessary specifications and materials for the satisfactory manufacture and performance of a component or assembly.

Computer Information System—The knowledge of mechanical systems, mechanisms, and components enables the technician to assemble data for automatic information systems.

Technical Sales—The ability to read and interpret engineering data and drawings, allows the technician to pursue a variety of engineering related fields, such as customer service, engineering sales, production control, and technical assistant in purchasing.

COURSES:

SEMESTER 1	15 WEEKS
ENDR120	Descriptive Geometry I
ENDR158	Technical Drawing
MATH100	Mathematics
ENG141	Language and Communications I
MECH129	Mechanics
MET100	Metallurgy
MACH110	Manufacturing Technology

SEMESTER 2	19 WEEKS
ENDR102	Machine Drawing and Design
ENDR121	Descriptive Geometry II
MATH100	Mathematics
ENG182	Language and Communications II
MECH139	Mechanics
MET100	Metallurgy
MACH110	Manufacturing Technology

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SEMESTER 3 15 WEEKS

In semester 3, students will be assigned to either TD100 or EL305, but not both.

ENDR201	Product Design
ENDR220	Kinematics I
ENDR226	Descriptive Geometry III
MATH200	Mathematics
MECH229	Mechanics of Materials
TD100	Metrology
ENG264	Language and Communications
ENDR202	Manufacturing Processes
EL305	Electrical Fundamentals and Drawing

SEMESTER 4 19 WEEKS

Students who have completed TD100 in semester 3 will take EL305 in semester 4. Students who have completed EL305 in semester 3 will take TD100 in semester 4.

ENDR201	Product Design
ENDR221	Kinematics II
ENDR227	Descriptive Geometry IV
MATH200	Mathematics
MECH239	Mechanics of Materials
ENG263	Language and Communications
MATH210	Applied Computer Programming I
EL305	Electrical Fundamentals and Drawing
TD100	Metrology

MECHANICAL ENGINEERING TECHNOLOGY—TOOL DESIGN AND MACHINE DESIGN

GBC Code AR119 **Starting:** September and January
Casa Loma Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in grades 11 and 12 at, or above, the general level.

ABOUT THE PROGRAM: The tool and design technologist works in the design offices of manufacturing companies and consulting engineers. The tool designer helps decide on manufacturing methods, develops the manufacturing sequence and decides what tooling is needed to make each part. He or she creates the designs for special tools such as jigs, fixtures, dies and moulds which play a vital role in modern manufacturing practice. The design of transfer systems with their associated controls is another design area for the technologist.

This three-year program is divided into six semesters which cover the theoretical and practical aspects of tool design. The student will be stationed at one of the drafting tables in our design office. This practical approach is the same as would be encountered in industry. The well-equipped design office, library, workshops and laboratories give the student a realistic environment in which to develop.

CAREER PROSPECTS:

Tool Design Option

Tool Designer—The technologist is capable of creating the design and developing the drawings for jigs, fixtures, dies and moulds. The work would involve close liaison with engineers, technicians and production personnel.

Technical Sales—The knowledge of machine tools, types of steel, methods of production and tool design enables the technologist to be a sales representative for a manufacturing company.

Estimator-Planner—This position involves working with production personnel to determine the exact production procedures, location of production facilities, and cost of manufacture.

Computer Aided Designer—With a solid understanding of programming, the designer can develop and process programs for designing and manufacturing tools on a CAD/CAM System.

Machine Design Option

Drawings and Specifications—The technologist's training provides the background and the skills to develop layout drawings, expand basic design sketches, to make appropriate working drawings, and to list the necessary specifications and materials for the satisfactory manufacture and performance of a component or assembly.

Machine and Product Design—The design of machine components or complete systems from basic ideas and concepts to final specifications and costs.

Computer Design and Graphics—The ability to program or process data in a computer for the purpose of graphic and theoretical design to the final graphic detail drawing.

Estimating and Quality Control—The estimating of costs of production and the study and analysis of quality controls in the manufacturing of products.

Technical Sales—The ability to read and interpret engineering data and drawings, allows the technologist to pursue a variety of engineering related fields. such as customer service, engineering sales, production control, and technical assistant in purchasing.

OPTIONS: Tool design, machine design

COURSES:

SEMESTER 1 15 WEEKS

ENDR120	Descriptive Geometry I
ENDR158	Technical Drawing
MATH100	Mathematics
ENG141	Language and Communications I
MECH129	Mechanics
MET100	Metallurgy
MACH110	Manufacturing Technology

SEMESTER 3 15 WEEKS

In Semester 3, students will be assigned to either TD100 or EL305, but not both.

ENDR220	Kinematics I
ENDR140	Die Design I
ENDR202	Manufacturing Processes

Option 1—Tool Design

SEMESTER 2 19 WEEKS

ENDR121	Descriptive Geometry II
ENDR130	Jig and Fixture Design
ENG182	Language and Communications II
MACH110	Manufacturing Technology
MATH100	Mathematics
MECH139	Mechanics
ENDR226	Descriptive Geometry III
ENG264	Language and Communications
MATH200	Mathematics
MECH229	Mechanics of Materials
TD100	Metrology
EL305	Electrical Fundamentals and Drawing

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SEMESTER 4 19 WEEKS

Students who have completed TD100 in Semester 3 will take EL305 in Semester 4.
Students who have completed EL305 in Semester 3 will take TD100 in Semester 4.

EL305	Electrical Fundamentals and Drawing
ENDR221	Kinematics II
ENDR227	Descriptive Geometry IV
ENDR244	Die Design II
ENG263	Language and Communications
MATH200	Mathematics
MATH210	Applied Computer Programming I
MECH239	Mechanics of Materials

SEMESTER 5 15 WEEKS

ENDR342	Tool Design I
ENDR347	Theory of Machines I
ENDR348	Computer Aided Design I
ENDR349	Computer Aided Manufacture I
MATH310	Mathematics III
MECH111	Mechanics of Fluid
SC311	Engineering Science

SEMESTER 6 19 WEEKS

ENDR357	Theory of Machines II
ENDR358	Computer Aided Design II
ENDR352	Tool Design II
ENDR359	Computer Aided Manufacture II
MATH310	Mathematics III
PHY301	Thermodynamics
SC321	Engineering Science

Option 2—Machine Design

SEMESTER 2 19 WEEKS

ENDR102	Machine Drawing and Design
ENDR121	Descriptive Geometry II
ENG182	Language and Communications II
MACH110	Manufacturing Technology
MATH100	Mathematics
MECH139	Mechanics
MET100	Metallurgy

SEMESTER 3 15 WEEKS

In Semester 3, students will he assigned to either TD100 or EL305, hut not both.

ENDR220	Kinematics I
ENDR201	Product Design
ENDR202	Manufacturing Processes
ENDR226	Descriptive Geometry III
ENG264	Language and Communications
MATH200	Mathematics
MECH229	Mechanics of Materials
TD100	Metrology
EL305	Electrical Fundamentals and Drawing

SEMESTER 4 19 WEEKS

Students who have completed TD100 in Semester 3 will take EL305 in Semester 4.
Students who have completed EL305 in Semester 3 will take TD100 in Semester 4.

EL305	Electrical Fundamentals and Drawing
ENDR221	Kinematics II
ENDR201	Product Design
ENDR227	Descriptive Geometry IV
ENG263	Language and Communications
MATH200	Mathematics
MATH210	Applied Computer Programming I
MECH239	Mechanics of Materials
TD100	Metrology

SEMESTER 5 15 WEEKS

ENDR341	Machine Design I
ENDR347	Theory of Machines I
ENDR348	Computer Aided Design I
ENDR349	Computer Aided Manufacture I
MATH310	Mathematics III
MECH111	Mechanics of Fluid
SC311	Engineering Science

SEMESTER 6 19 WEEKS

ENDR357	Theory of Machines II
ENDR358	Computer Aided Design II
ENDR351	Machine Design II
ENDR359	Computer Aided Manufacture II
MATH310	Mathematics III
PHY301	Thermodynamics
SC321	Engineering Science

ARCHITECTURAL TECHNICIAN–DRAFTING

GBC Code AR104 **Starting:** September and January
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in years 3 and 4 at, or above, the general level, or equivalent.

ABOUT THE PROGRAM: The architectural drafting technician is one of a team of technical personnel involved in the construction industry. Graduates of this two-year program play a significant role as detail draftspersons, field supervisors, sales consultants and expeditors in architectural, engineering and fabrication firms, government and municipal offices.

Office atmosphere is simulated by grouping students and using actual building projects from industry. Job site visits, guest speakers, specifications, mechanical and electrical information are arranged to give the student a complete understanding of an actual "living" project.

CAREER PROSPECTS:

Architectural Drafting—The technician is able to produce a set of architectural working drawings, to co-ordinate mechanical, structural and electrical with architectural drawings and specifications.

Architectural Presentation and Design—A competent draftsperson is able to assist in the preparation of plans and design drawings for presentation purposes, is familiar with lettering and titling and is capable in the measurement and survey work of existing buildings and sites.

Building Materials—A thorough knowledge of building materials and how they are used in construction makes the technician able to work as an estimator or salesperson in a manufacturing company.

Methods of Construction—A clear understanding of how a building is assembled, and why, is needed before it can be drawn accurately. Technicians with this knowledge have found employment with developers and construction firms.

Engineering—The broad scope of architecture must include a study of structures and mechanical systems within the huilding. This would include theory as well as practical application which could lead to employment within these related fields.

Building Codes and Specifications—The use and interpretation of the building codes and specifications as used in the classroom case study of an actual building project is invaluable in finding employment in government, architectural, engineering or construction offices.

COURSES:

SEMESTER 1 15 WEEKS

ARCH100	Materials and Methods
ARDR102	Architectural Drafting I
ARDR120	Descriptive Geometry I
MATH109	Mathematics
ENG141	Language and Communications I
MECH100	Mechanics
EC100	Economics

SEMESTER 2 19 WEEKS

ARCH100	Materials and Methods
ARDR102	Architectural Drafting I
SURV110	Surveying
MATH109	Mathematics
ENG182	Language and Communications II
MECH110	Mechanics of Materials
ARDR103	Architectural Rendering and Presentation I

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SEMESTER 3	15 WEEKS
In Semester 3, students will be assigned to either SURV102 or ARDR115, but not both.	
ARCH200	Materials and Methods
ARDR111	Mechanical Installations Drafting I
ARDR202	Architectural Drafting II
MATH209	Mathematics
ENG263	Language and Communications
MATH122	Applied Computer Programming
ARDR203	Architectural Rendering and Presentation II
SURV102	Quantity Surveying I
ARDR115	Structural Drafting

SEMESTER 4	19 WEEKS
Students who have completed SURV102 in Semester 3 will take ARDR115 in Semester 4. Students who have completed ARDR115 in Semester 3 will take SURV102 in Semester 4.	
ARCH200	Materials and Methods
ARDR111	Mechanical Installations Drafting I
ARDR202	Architectural Drafting II
MATH209	Mathematics
ENG264	Language and Communications
ARDR115	Structural Drafting
ARDR104	Architectural Design and Planning
PHY100	Applied Physics
SURV102	Quantity Surveying I

ARCHITECTURAL TECHNOLOGY

GBC Code AR122 **Starting:** September
Casa Loma Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in Grades 11 and 12 at or above the general level, or equivalent.

ABOUT THE PROGRAM: The Architectural Technology Program will stress the conceptual and space requirements in design as well as the economics of space and building methods, writing specifications, building codes; and building construction law will emphasize the legal responsibility of an architectural firm, building construction office or your own office.

Computer design and drafting will form a major part of semesters 5 and 6, during which time the student will design a building project and finalize the working drawings with the aid of our own computers at George Brown College.

Regular visits to construction sites and completed buildings are arranged by the staff to augment classroom lectures and discussions dealing with design and building construction. Downtown Toronto offers valuable resources for this type of on-the-job visualization and experience.

CAREER PROSPECTS: Graduates of this three-year program, because of its wide subject base, can look forward to employment in many avenues of the architectural and building construction industry. These would include:

- assisting an architect in the development of design sketches and presentation drawings.
- assisting in the presentation of formal contract documents including specifications and working drawings.

- assisting a contractor in estimating and material take off of a project.
- involvement in sales and development of building products and technical sales literature.
- assisting in the supervision of a building project for an architect or building contractor.
- operating and using a C.A.A.D. system in the production of design and working drawings.
- assisting an architect or developer in the preparation of a master plan for a residential subdivision.
- other areas also open to graduates would include: Building Inspector; Property Management; Real Estate; Clerk of Works; Technical Representative; Municipal Building Dept. Offices.

COURSES:

SEMESTER 1	15 WEEKS
ARCH110	Materials and Methods I
ARDR167	Architectural Drafting and Design I
ARDR120	Descriptive Geometry I
MATH166	Mathematics I
ENG141	Language and Communications I
MECH100	Mechanics
EC100	Economics

SEMESTER 2	19 WEEKS
ARCH120	Materials and Methods II
ARDR177	Architectural Drafting and Design II
SURV110	Surveying
MATH176	Mathematics II
ENG182	Language and Communications II
MECH110	Mechanics of Materials
ARDR103	Architectural Rendering and Presentation I

SEMESTER 3	15 WEEKS
ARCH210	Materials and Methods III
ARDR235	Mechanical Installations Drafting I
ARDR236	Architectural Drafting and Design III
MATH262	Mathematics III
ENG263	Language and Communications
PRGM230	Applied Computer Programming
ARDR203	Architectural Rendering and Presentation II
SURV102	Quantity Surveying I

SEMESTER 4	19 WEEKS
ARCH220	Materials and Methods IV
ARDR245	Mechanical Installations Drafting II
ARDR246	Architectural Drafting and Design IV
MATH272	Mathematics IV
ENG264	Language and Communications
PHY100	Applied Physics
ARDR247	Computer Aided Drafting
ARDR248	Codes and Specifications

SEMESTER 5	15 WEEKS
ARCH300	Building Science
MECH330	Theory of Structures
URB300	Urban Planning
SPEC300	Specifications I
CO309	Construction Law I
EL369	Electrical Installations
ARDR301	Computer Aided Design I
ARCH301	Architectural Design I

SEMESTER 6	19 WEEKS
ARCH302	History of Building
EC300	Building Economics
ARCH303	Community Planning
SPEC301	Specifications II
CO319	Construction Law II
MECH331	Building Engineering
ARDR311	Computer Aided Design II
ARCH311	Architectural Design II

DRAFTING TECHNICIAN

GBC Code AR105 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in years 3 and 4 at, or above, the general level, or equivalent.

ABOUT THE PROGRAM: Versatility and flexibility are the objectives in preparing the graduate student for employment in one of a variety of construction drafting fields.

The program teaches and demonstrates accepted drafting skills to be developed by the student in architectural, mechanical services, survey and structural drafting, within the parameters of recognized related theory of construction, practical design and component manufacturing materials and processes.

Drafting classes are conducted as a drawing office with projects developed from theory to incorporating the information in a working drawing. Students progress from simple projects to more complex assignments applying learned theory and practiced skills.

CAREER PROSPECTS:

Architectural Drafting—The draftsperson prepares working drawings from the architect's design sketches for the layout, construction and aesthetic appearance of residential, commercial, industrial and institutional buildings.

Mechanical Services Drafting—The draftsperson prepares working drawings for the mechanical services of buildings, including plumbing, drainage, heating, refrigeration and air conditioning, and component parts.

Positions may be attained with engineering firms in each or all of these fields and with manufacturers of component parts for the various systems.

Civil Drafting—The draftsperson prepares working drawings for structural steel and reinforced structures.

Many sources of employment are available, such as structural engineering firms, and structural steel and reinforcing fabricators.

Survey Drafting—The draftsperson prepares drawings from field notes for site plans and legal surveys. Employment would be found with land surveyors, municipal and appraisal offices.

COURSES:

SEMESTER 1	15 WEEKS
ARDR112	Drafting
ARCH100	Materials and Methods
MATH109	Mathematics
ENG141	Language and Communications I
MECH100	Mechanics
STR123	Structural Design 1
SURV100	Survey Computation and Drafting 1

SEMESTER 2	19 WEEKS
ARDR108	Structural Drafting I
ARDR154	Presentation Drawing
ARCH100	Materials and Methods
MATH109	Mathematics
ENG182	Language and Communications II
ARDR110	Architectural Drafting I
SURV100	Survey Computation and Drafting 1
MATH122	Applied Computer Programming

SEMESTER 3	15 WEEKS
ARDR202	Architectural Drafting II
MATH209	Mathematics
ENG263	Language and Communications
ARCH200	Materials and Methods
STR223	Structural Design II
ARDR111	Mechanical Installations Drafting I
MECH110	Mechanics of Materials
ARDR154	Presentation Drawing

SEMESTER 4	19 WEEKS
ARDR202	Architectural Drafting II
MATH209	Mathematics
ENG264	Language and Communications
ARDR208	Structural Drafting II
ARDR111	Mechanical Installations Drafting I
ARCH200	Materials and Methods
PHY125	Applied Physics

MECHANICAL ENGINEERING—DRAFTING

GBC Code AR560 **Starting:** September
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITE: Pre-entry test.

BACKGROUND: Interest in mechanical engineering and aptitude for drawing with previous experience in drafting, machine shop and other metal working would be useful.

ABOUT THE PROGRAM: This one-year program has been designed to provide a concentrated course in mechanical drafting and related areas, with the emphasis on practical application. Students graduating from this program with honours standing will be considered for admission into the first year of a technician program.

Instruction takes place in modern classrooms and drafting rooms and the up-to-date equipment used is consistent with that found in present day engineering offices. Classroom approach duplicates actual industrial drawing office procedures in the handling of assignments and projects.

CAREER PROSPECTS:

Draftsperson—Prepares working drawings in a variety of fields including machine drawing, materials handling, process piping and mechanical drafting. The graduate will work as a junior draftsperson under the supervision of a senior draftsperson and as part of the engineering design team comprising designers, engineers and technicians.

After gaining practical experience in a drawing office many graduates move to other jobs which are closely related to that of the draftsperson. Some of these are:

Technical Sales—Since the draftsperson has a sound knowledge of the company and its products he or she may, if he or she is sales-oriented and likes meeting people, move to a sales position.

Quality Control—This involves working with the drawings and specifications produced in a company's engineering department and ensuring that the manufactured parts are correctly made and conform to specifications.

Customer Liaison—The experienced draftsperson who is familiar with the company's products may find working with the company's customers an interesting job. Many items of detail design and changes must be discussed with customers during the development of major contracts. This information is then relayed to the other members of the engineering design team.

COURSES:

SEMESTER 1	20 WEEKS
ENDR500	Mechanical Drawing
ENDR508	Descriptive Geometry
ENDR510	Process Piping
MACH544	Manufacturing Technology
MATH530	Mathematics
ENG530	Industrial Communications

SEMESTER 2	20 WEEKS
ENDR501	Machine Drawing
ENDR508	Descriptive Geometry
ENDR510	Process Piping
MACH544	Manufacturing Technology
MATH530	Mathematics
ENG530	Industrial Communications

PROCESS PIPING DESIGN TECHNICIAN

GBC Code AR563 **Starting:** November
Casa Loma Campus **Certification:** Certificate
3 Semesters

PREREQUISITE: Pre-entry test.

ABOUT THE PROGRAM: The process piping design technician is generally employed by consulting engineers, public utilities and the petro/chemical industry. He or she is a member of the engineering design team responsible for the design, layout, detailed working drawings of automated industrial plants. These include oil refineries, breweries, power generating, water processing and food and drug plants.

CAREER PROSPECTS:

Piping Drafting—The technician is able to produce detail drawings and complete material handling layouts from design data and specifications.

Piping Design—A thorough knowledge of piping standards, codes, stress, flexibility, supports and fluid mechanics will enable the technician to work as a junior designer with a consulting engineer.

Specifications and Estimating—The graduate will be able to assist in the writing of specifications and estimate the cost of an installation.

Technical Sales—With a knowledge of pipes, valves, pumps and fittings, the technician could pursue a variety of sales careers in the many related supplier and manufacturing industries.

COURSES:

SEMESTER 1	17 WEEKS
ENDR563	Descriptive Geometry I
ENDR564	Pipe Drafting
MATH566	Mathematics I
ENG563	Language and Communications I
MECH563	Mechanics I
MET563	Metallurgy

SEMESTER 2	17 WEEKS
ENDR563	Descriptive Geometry I
ENDR565	Pipe Drafting and Design
MATH566	Mathematics I
ENG563	Language and Communications I
ENDR566	Structural Drafting
MECH564	Mechanics of Fluids

SEMESTER 3	18 WEEKS
ENDR567	Descriptive Geometry II
ENDR568	Design and Layout of Piping Systems
ENDR569	Materials and Processes
MATH567	Mathematics II
ENG564	Language and Communications II

PIANO TECHNICIAN

GBC Code AR114 **Starting:** September 1986
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and successful passing of hearing and manual dexterity tests as set by the College.

ABOUT THE PROGRAM: A piano technician is a person skilled in the repair, rebuilding and maintenance of pianos, most often self employed, working in or from a small workshop. He or she can renovate, rebuild, repair, voice and tune pianos of any piano maker.

The program and practice of the craft is suitable for both men and women who typically start their private practice tuning pianos, advising clients on work required for the preservation and repair of their instruments, and gradually building up a full practice.

CAREER PROSPECTS: Graduates can expect to provide service for performing musicians, private owners of instruments, and such institutions as school boards, universities, concert halls and schools of music.

COURSES:

SEMESTER 1	15 WEEKS
PIAN100	Tuning
PIAN101	Action Regulations
PIAN102	Stringed–Wrestplank–Soundboard–Bridges
ENG141	Language and Communications I
MATH118	Mathematics
PHY118	Applied Physics
WOOD100	Woodworking

SEMESTER 2	19 WEEKS
PIAN100	Tuning
PIAN101	Action Regulations
PIAN102	Stringed–Wrestplank–Soundboard–Bridges
ENG182	Language and Communications II
MATH118	Mathematics
PHY118	Applied Physics
WOOD100	Woodworking

SEMESTER 3	15 WEEKS
PIAN200	Tuning
PIAN201	Action Regulation–Repair
PIAN202	Stringed–Wrestplank–Soundboard–Bridges
PIAN205	Workshop Technology
ENG263	Language and Communications
SC108	Science of Sound
SBM100	Small Business Management

SEMESTER 4	19 WEEKS
PIAN200	Tuning
PIAN201	Action Regulation–Repair
PIAN202	Stringed–Wrestplank–Soundboard–Bridges
PIAN205	Workshop Technology
SC108	Science of Sound
SBM100	Small Business Management
ENG264	Language and Communications

STATIONARY POWER PLANT ENGINEERING

GBC Code AR118 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in grade 12 mathematics and English at, or above, the general level.

ABOUT THE PROGRAM: This two-year program is designed to prepare the student for a career in the operation and management of the power equipment which serves industry. The occupation is graduated into four levels, 4th class being the lowest.

Provincial legislation governs standards and certification and these are incorporated into the program. Over the two years, the student will be trained in a well-equipped power plant used exclusively for the program and will also spend considerable time in industry in order to get further exposure to the equipment in functioning plants and to gain qualifying time toward certification.

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Although the primary objective is to prepare graduates for duties at the 3rd class level, some time will have been devoted to subjects at the 2nd class level, to enhance the graduate's prospects for achieving this level as quickly as he/she may desire. Opportunity exists within the industry at the higher levels and graduates will be in an advantageous position to continue with their studies upon completion of the College program.

Students will receive some training in the programmable monitoring process involving computerized systems. In addition, troubleshooting, using simulated power plant conditions, will be possible with computerized equipment.

Examinations will be written at periodic intervals during the semesters and, subject to the accumulation of sufficient qualifying time and the achievement of acceptable standards in all courses in the program, the student will graduate with a 3rd class certificate.

CAREER PROSPECTS: Graduates with a certificate of qualification 3rd class are in a better position to obtain employment than those with the lower 4th class level. Because of the nature of the training provided in this 2-year program, graduates with sights on advancement are in an advantageous position to move to the 2nd class level by continuing with either extension class or correspondence studies. Positions of higher responsibility are attainable in this occupation with 2nd or 1st class certificate of qualification.

COURSES:

SEMESTER 1	15 WEEKS
STAT100	Power Plant Operation
STAT101	Power Plant Maintenance
STAT105	Power Plant Instrumentation and Control I
STAT103	Power Plant Water Treatment and Combustion I
STAT106	Power Plant Boilers and Auxiliaries
EL118	Power Plant Electrical Theory

SEMESTER 2	19 WEEKS
STAT100	Power Plant Operation
STAT101	Power Plant Maintenance
STAT108	Power Plant Water Treatment and Combustion II
STAT107	Power Plant Lubrication and Internal Combustion Engineering
EL128	Power Plant Electrical Shop
STAT102	Power Plant Heat Engines I
STAT104	Power Plant Heating Refrigeration and Air Conditioning

SEMESTER 3	15 WEEKS
STAT200	Power Plant Operation
STAT209	Power Plant Maintenance
STAT202	Power Plant Heat Engines II
ARDR234	Power Plant Mechanical Blue Print Reading
STAT204	Power Plant Heating, Refrigeration and Air Conditioning
EL218	Power Plant Electrical Theory
STAT207	Power Plant Instrumentation and Control II
EL229	Power Plant Electrical Blue Print Reading

SEMESTER 4	19 WEEKS
STAT200	Power Plant Design and Operation
STAT201	Power Plant Supervision and Management
STAT205	Power Plant Boilers and Auxiliaries
STAT206	Power Plant Prime Movers
EL228	Power Plant Electrical Shop
ENG210	Power Plant Communications
STAT208	Power Plant In-plant Training

STATIONARY ENGINEERING—4TH CLASS

GBC Code AR548
Casa Loma Campus
40 Weeks

Starting: May, September, October and January
Certification: Certificate

PREREQUISITE: Pre-entry test.

ABOUT THE PROGRAM: This program provides instruction in all modules required for accreditation toward the 4th class level of stationary engineering. In addition, practical training in boiler operation, together with ancillary equipment, is provided in a modern, well-equipped registered power plant used exclusively for training purposes. Students will receive some training in the programmable monitoring process involving computerized systems. In addition, troubleshooting, using simulated power plant conditions will be possible with computerized equipment.

Successful completion of the program entitles the student to the 4th Class Certificate of Qualification issued by the certifying ministry; however, this is contingent upon full attendance and modular accreditation. Although the terminal objective is 4th class certification, graduates are in an advantageous position to continue with studies at the 3rd class level.

CAREER PROSPECTS: Possession of a Stationary Engineer Certificate of Qualification 4th Class permits the graduate to seek employment as a certified stationary engineer in any registered power plant irrespective of its size. While the 4th class certificate is the lowest of the four levels of qualification, opportunities exist for progression through the higher levels by combining employment and accreditation obtained by passing modular examinations. Fourth class level engineers are also employed in a maintenance capacity in plants not necessarily required (by law) to have engineers in attendance.

COURSES:

40 WEEKS	
STAT548	Power Plant Theory
STAT549	Power Plant Laboratory
STAT550	Power Plant Mechanical Maintenance
ELT511	Power Plant Electrical Theory
ELT512	Power Plant Electrical Shop
SC552	Power Plant Applied Science

DRAFTING

GBC Code AR540 **Starting:** September
Casa Loma Campus **Certification:** Certificate
40 Weeks

PREREQUISITE: Pre-entry test.

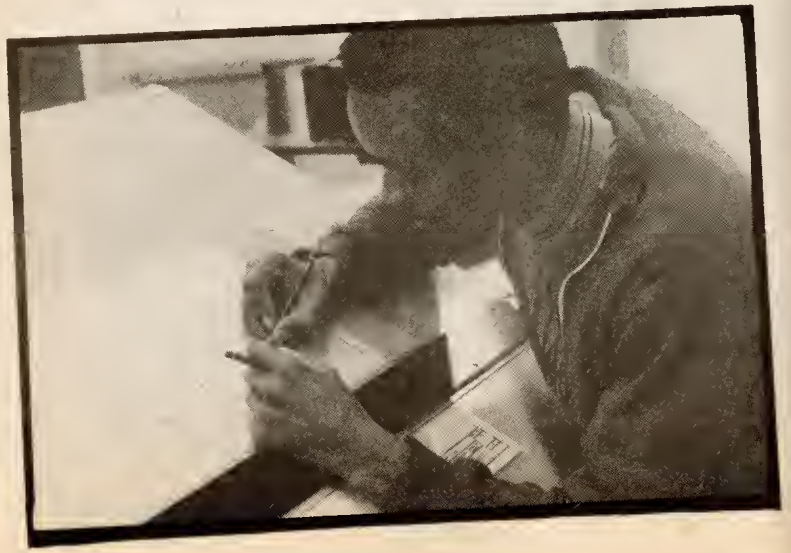
ABOUT THE PROGRAM: This skill training program prepares the student for employment in one of a variety of drafting fields by teaching the related theory of construction, manufacturing and accepted practice as well as developing drafting skills.

The drafting classes are conducted as a drawing office. The theory is introduced and studied in relation to its application in drawing. Projects are developed from simple basic forms by applying knowledge gained from lecture and demonstration. The student progresses to more complex working drawings combined with continued practice of drawing skill and added knowledge.

CAREER PROSPECTS: Graduates of this program find employment as junior draftspeople in architectural and engineering offices, municipal and provincial offices. Students graduating from this program with honours standing will be considered for admission into the first year of a technician program.

COURSES:

40 WEEKS	
ARDR551	Architectural Drawing
ARDR552	Mechanical Drawing
ELDR558	Electrical Drawing
ARDR559	Mechanical Services Drawing
MATH530	Mathematics
ENG530	Industrial Communications



HEATING TECHNICIAN

GBC Code AR542 **Starting:** September and January
Casa Loma Campus **Certification:** Certificate
3 Semesters

PREREQUISITE: Pre-entry test.

ABOUT THE PROGRAM: In the heating field, there is a considerable demand for technical personnel who are knowledgeable in oil, gas and electric heating and cooling systems. This demand has been created, in part, by the expansion of building construction.

Rising fuel prices and the need to conserve energy has created a growing concern in the consuming public as to the efficient operation of their heating systems. This sconcern has created a demand for skilled technicians knowledgeable in the servicing, installation, and design of the various types of residential and commercial heating and cooling systems.

The Heating Technician Program covers the application of all of the basic fuels (i.e. oil, gas, and propane) as well as electric heating and cooling systems. Heating system layout and design are covered in such areas as load calculations, system design and system balancing. New advances in residential and commerical heating technology such as heat pumps, high efficiency furnaces, and programmable environmental control have also been integrated into the program.

Both the theory and the practice of the above have equal weight which gives the student a well rounded knowledge in the design, servicing, and installation of heating systems.

CAREER PROSPECTS: Since the heating technician program covers many facets of heating and heating systems, graduates of the program will find diverse employment opportunities. Many are employed by gas companies, oil companies, and their prime contractors and dealers in sales, servicing and installation of heating systems. A large number of graduates will find employment with independent heating and cooling companies in design and layout as well as servicing and installation of heating and cooling systems. Large private and public corporations such as municipalities, school boards and property management companies will also employ graduates in the maintenance of their heating systems.

COURSES:

SEMESTER 1	18 WEEKS
HT502	Basic Electricity
HT501	Oil Burners
HT510	Heating (Residential Heat Load)
MATH538	Mathematics
ENG586	Language and Communication
ARDR531	Drafting and Blueprint Reading

SEMESTER 2	16 WEEKS
HT534	Propane
HT572	Residential HVAC System Design
HT540	Gas Burners (Fitter II)
PHY531	Physics
ENG587	Language and Communication

SEMESTER 3	18 WEEKS
HT573	Heating (Commercial Oil and Gas)
HT574	Heating (Commercial Systems)
MATH539	Mathematics
ENG588	Language and Communication
HT521	Central Air Conditioning and Heat Pumps

GAS FITTER

GBC Code AR543
Casa Loma Campus
26 Weeks

Starting: September, December, March and June
Certification: Certificate

PREREQUISITE: Pre-entry test.

ABOUT THE PROGRAM: The complexity and variety of natural gas equipment in operation today has created a need for the well trained gas burner servicer who is knowledgeable in domestic gas ranges, dryers, and the large commercial package gas fired boilers.

The gas burner servicing program has been developed by the College in response to a need in the gas industry. The program gives instruction in the installation and servicing of domestic gas burners, gas appliances, and commercial and industrial gas burners. The program has been designed to create a blend between theory and practice by giving equal weight to classroom instruction and practice in the gas shop.

CAREER PROSPECTS: Graduates of the gas fitter program will find wide and diverse employment opportunities in the gas servicing industry. Many are employed by gas companies and their prime contractors as well as independent heating companies.

Graduates who seek self-employment may elect to open their own businesses. Many graduates from the gas fitter program are working today as sub-contractors offering their services to major heating companies in the industry.

COURSES:

26 WEEKS	
HT569	Electricity
HT570	Residential Gas Burners
MATH533	Mathematics
HT571	Residential Heating Equipment
HT514	Commercial and Industrial Gas Burners
ENG541	Industrial Communications

REFRIGERATION AND AIR CONDITIONING

GBC Code AR544
Casa Loma Campus
36 Weeks

Starting: Continuously
Certification: Certificate

PREREQUISITES: Grade 10 or equivalent and/or functional level test.

ABOUT THE PROGRAM: This program is designed to prepare people to enter an apprenticeship program leading to certification (compulsory in Ontario) as a Journeyman Refrigeration and Air Conditioning Mechanic. This is an excellent opportunity for people to enter a challenging trade that pays well. The Industrial Training Branch of the Ministry of Colleges and Universities will grant to graduate students appropriate time off the apprenticeship period. The graduates are excused some of the in-school training of the apprenticeship program. The courses are presented in blocks of six weeks.

CAREER PROSPECTS:

Installer—The apprentice/graduate carries out installation duties assigned by a foreman or a mechanic. These include running refrigerant and water lines, siting and connecting up major items of equipment such as evaporators, condensing units and cooling towers. Inter-unit electrical wiring, siting controls and running control line circuitry are tasks which may also be allotted.

Serviceman—The apprentice/graduate may undertake service work under the supervision of a mechanic. Troubleshooting and repairs to a wide range of heating, ventilating, and air conditioning (HVAC) equipment will be carried out, involving both mechanical and electrical problems.

Salesperson—The graduate may work for an HVAC parts and equipment supplier. Duties include estimating and costing, advising customers on parts selection and consulting with manufacturers on a client's behalf. This position often leads to the offer of employment in the installation, maintenance, or service fields.

Maintenance Mechanic—The graduate may assist in the installation, service, and maintenance of the plant and equipment of employers such as a brewery, large factory, or educational institution HVAC equipment.

COURSES:

SEMESTER 1	36 WEEKS		
REF534	Electricity	REF537	Refrigeration
MATH560	Mathematics	SBM535	Small Business Management
REF535	Refrigeration	WELD515	Oxy-Acetylene Welding/ Brazing/Cutting
MATH561	Mathematics		
ARDR514	Drafting Blueprint Reading	SBM536	Small Business Management
REF536	Refrigeration	REF538	Refrigeration—Air Conditioning
SBM534	Small Business Management	SBM537	Small Business Management
ARDR515	Drafting Blueprint Reading	REF539	Refrigeration—Air Conditioning

Appliance Servicing

GBC Code AR545
Casa Loma Campus
36 Weeks

Starting: Continuously
Certification: Certificate

PREREQUISITES: Grade 10 and/or pre-entry test.

ABOUT THE PROGRAM: This program is designed to give a thorough knowledge of the theory and practice required for the maintenance and repair of home appliances. The student should have a high mechanical aptitude. Graduates are prepared for occupations in servicing, and as factory representatives, field representatives, appliance salespeople, appliance inspectors, and production supervisors. Courses in laundry equipment, refrigeration and electrical appliances are presented in blocks of six weeks.

CAREER PROSPECTS:

Servicing:

The graduate will diagnose service problems and repair: clothes washers, clothes dryers, dishwashers, ranges, microwave ovens, refrigerators, freezers, and window air conditioners. This may be done in the customer's home or other location.

Sales:

The salesperson will market and give technical advice to potential customers in department or appliance stores.

COURSES:

36 WEEKS	
APL535	Electrical
MATH560	Mathematics
APL536	Conventional and Microwave Ranges
MATH561	Mathematics
APL537	Basic Refrigeration and Refrigerators
SBM534	Small Business Management
APL538	Freezers and Room Air Conditioners
SBM535	Small Business Management
APL539	Dishwashers and Clothes Dryers
SBM536	Small Business Management
APL540	Clothes Washers and Compactors
SBM537	Small Business Management

Carpenter–General

GBC Code AR549
Casa Loma Campus
2 Semesters

Starting: September, October and January
Certification: Certificate

PREREQUISITES: Pre-entry test.

ABOUT THE PROGRAM: This program is offered to students who want to learn the skills that would fit them for the carpentry industry. The program covers hand and power tools, general woodworking, acoustics, and welding. If the student wishes to continue into the apprenticeship program, credits within the apprenticeship regulations are given for the in-school training.

CAREER PROSPECTS: The construction industry will continue to require tradespeople for on-site construction and shop fabrication. The graduate may become employed in residential construction, general contracting, renovations, and the rehabilitation of existing buildings. Opportunities also exist in many other related woodworking areas.

COURSES:

SEMESTER 1	20 WEEKS
CAR511	Woodwork General I
CAR512	Construction Layout I
CAR513	Power Tools
CAR514	Hand Tools
CAR515	Safety
ARDR511	Blueprints I
MATH512	Trade Calculations
WELD510	Welding I Oxy-Acetylene

SEMESTER 2	20 WEEKS
CAR516	Rigging
CAR517	Acoustic Ceilings
CAR531	Woodwork General II
CAR532	Construction Layout II
ARDR532	Blueprints II
MATH532	Trade Calculations
CO500	Building Techniques

MASONRY

GBC Code AR550
Casa Loma Campus
20 Weeks

Starting: September, November and January
Certification: Certificate

PREREQUISITE: Pre-entry test.

ABOUT THE PROGRAM: This program presents an introduction to the construction field with the emphasis on masonry. It endeavours to develop skill and dexterity in basic bricklaying techniques and to prepare and equip graduates for a formal apprenticeship.

CAREER PROSPECTS: The masonry industry is an important component of the construction industry. The bricklayer is required to be a versatile and capable craftsperson who can handle the many tasks involved in the practice of the trade. The graduate may become employed in the residential industry, general contracting, renovating, landscaping, and other masonry-related activities including self-employment.

COURSES:

	20 WEEKS
MAS530	Masonry—Theory
MAS531	Masonry—Practical
MATH533	Mathematics
ARDR533	Drafting
ENG541	Industrial Communications
WELD547	Welding

BUSINESS

BUSINESS

GBC Code B109 **Starting:** September
St. James Campus **Certification:** Diploma
6 Semesters
4 Semesters—Optional third year (2 semesters)

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent.

ABOUT THE PROGRAM: George Brown's Business Division offers the highly concentrated training needed to enter the specialty area of the student's choice. In the first semester of the two-year business programs, students attend introductory courses in accounting, data processing, marketing and physical distribution as well as business English and business mathematics. After completing this short introductory semester, students specialize in one of the programs listed below for the balance of the two-year program.

PROGRAM A—Accounting
PROGRAM B—Data Processing
PROGRAM C—Marketing
PROGRAM D—Business—General
PROGRAM E—Physical Distribution
PROGRAM F—Business Administration—Accounting
PROGRAM G—Business Administration—Data Processing
PROGRAM H—Business Administration—Marketing

Students will select elective courses in specific semesters as they progress through their program. An elective course list appears below all major options.

Graduates of the accounting, data processing and marketing two-year programs qualify for Business Administration programs F, G or H. These programs are for students who desire more advanced study in business administration with concentration in one of three major options: Accounting, Data Processing or Marketing. It integrates the student's more advanced learning into a broader view of an organization as a whole. Advanced decision-making, planning and managerial skills are developed through the use of modern learning techniques.

BUSINESS GENERAL—ACCOUNTING

GBC Code B109A
St. James Campus
4 Semesters

Starting: September and January
Certification: Diploma

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent.

ABOUT THE PROGRAM: The courses included in this program provide a valuable preparation for students interested in accounting occupations in business and industry. They also offer preparatory training for students interested in continuing their studies to receive professional accounting designations such as Registered Industrial Accountant or Certified General Accountant. Subject credits are granted by the professional accounting societies in specified courses where content and standards are considered equivalent.

Graduates from our Business—Accounting program accept positions in banking, in public accounting firms, in large and small retail, wholesale and manufacturing businesses. Graduates may also be employed in positions less concerned with accounting but where their specialized training assists them in solving the many problems they will encounter in the other operational functions of business. The federal and provincial governments, with their complex regulations and taxing systems, seek community college accounting graduates for employment in the areas of financial management and taxation.

CAREER PROSPECTS: Accountants are required in every facet of our society. Graduates from this program will find career opportunities in manufacturing, merchandising, banking and finance, government, public institutions, recreation and service organizations.

Large firms tend to prefer graduates with leadership potential, a thorough knowledge of accounting skills, self confidence, and the ability to communicate freely. The new graduate may obtain employment in a training program which will provide a wide range of experience in various sections of the firm's accounting department, such as accounts payable, accounts receivable, payroll, cost accounting, etc.

In smaller firms, the graduate will probably be expected to perform a wider range of accounting tasks.

COURSES:

SEMESTER 1	15 WEEKS
ACC100	Introduction to Accounting I
EDP100	Introduction to Computer Programming
ENG101	Language and Communications
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Physical Distribution

SEMESTER 2	19 WEEKS
ACC101	Introduction to Accounting II
ENG102	Language and Communications
MATH115	Business Mathematics
PSY106	Human Relations
ELECT000	Elective

SEMESTER 3	15 WEEKS
ACC200	Financial Accounting I
ACC201	Management Information Systems
ACC202	Cost Accounting I
ENG201	English and the Business World
ELECT000	Elective

SEMESTER 4	19 WEEKS
ACC203	Financial Accounting II
ACC204	Cost Accounting II
ACC205	Auditing
BUS215	Job Search Skills
ELECT000	Elective

ELECTIVES:

ACC102	Accounting for Decision-Making
BUS116	Travel Planning I
BUS121	Women in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
MATH214	Statistics I
MATH215	Statistics II
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
TYP103	Typing for Beginners
TYP152	Advanced Typing
SOC126	Political Sociology: Continuing Social Issues
BUS227	Travel Planning II
LAW200	Commercial Law
LAW201	Business Law
MATH253	Quantitative Methods
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature
SBM166	Small Business Management I

BUSINESS GENERAL—DATA PROCESSING

GBC Code B109B
St. James Campus
4 Semesters

Starting: September and January
Certification: Diploma

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent.

ABOUT THE PROGRAM: Students in this program are trained in the theoretical and practical applications of computers to business. The program is of particular value to those who are interested in careers as computer programmers or who wish to advance to the level of Systems Analyst.

Students learn several programming languages, emphasis being on COBOL, the language most widely used in business. Skill is developed by working on realistic problem applications. In addition, a conceptual understanding of systems analysis and design is developed by a combined lecture and project approach.

Our computer facility, which includes an IBM 4341 system, and a lab equipped with IBM Personal Computers, supports interactive processing as well as batch processing. Programming languages available to students include COBOL, RPGII, BASIC, FORTRAN, PL/1 and a data base language.

CAREER PROSPECTS: Graduates receive a diploma in EDP, and are qualified to work as junior computer programmers.

JOB DESCRIPTIONS:

Computer Programmer—Working from a detailed description of a proposed application, a programmer defines the logic of a solution and codes computer instructions to generate the desired results from the computer.

Systems Analyst—Working with people from the department requesting computer service, a systems analyst examines and improves upon existing applications and coordinates the definition of proposed applications, including cost estimates and implementation schedules. This is a senior position to which a programmer may be advanced after several years of experience.

Computer Operator—Working from a schedule of jobs to be run, an operator monitors the running of the computer and follows written directions in response to specific snags which may arise. Graduates from our EDP program are able to quickly learn the specific requirements for operating any particular computer.

COURSES:

SEMESTER 1	15 WEEKS
ACC100	Introduction to Accounting I
EDP100	Introduction to Computer Programming
ENG101	Language and Communications
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Physical Distribution

SEMESTER 2	19 WEEKS
EDP101	COBOL I
EDP103	Programming 1
EDP104	Management Information Systems (MIS)
ENG102	Language and Communications
MATH116	Mathematics For EDP
PSY106	Human Relations

SEMESTER 3	15 WEEKS
EDP200	COBOL II
EDP209	RPG II—Introductory
EDP210	Systems Analysis and Design
ENG201	English and the Business World
MATH214	Statistics I
ELECT000	Elective

ELECTIVES:

ACC102	Accounting for Decision Making
BUS116	Travel Planning I
BUS121	Women in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
MATH214	Statistics 1
MATH215	Statistics II
PSY106	Human Relations
PSY161	Introductory Psychology

SEMESTER 4	19 WEEKS
BUS215	Job Search Skills
EDP204	Advanced Programming
EDP208	Advanced EDP Topics
EDP211	RPG II—Advanced
ELECT000	Elective
ELECT000	Elective

PSY162	Social Psychology
PSY211	Human Resources Development
TYP103	Typing for Beginners
TYP152	Advanced Typing
SOC126	Political Sociology: Continuing Social Issues
BUS227	Travel Planning II
LAW200	Commercial Law
LAW201	Business Law
MATH253	Quantitative Methods
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature
SBM166	Small Business Management 1

Business General—Marketing

GBC Code B109C
St. James Campus
4 Semesters

Starting: September and January
Certification: Diploma

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent.

ABOUT THE PROGRAM: The Marketing Program is highly concentrated in marketing subjects and is designed to prepare the student for a career in the field of marketing management, advertising, sales, marketing research or retail management.

The program makes extensive use of case studies, research projects and computerized decision-making simulations ("business games"), and video tape and related visual learning resources. The downtown location of the campus makes it ideal for field trips and industry projects.

CAREER PROSPECTS: Most marketing jobs involve dealing with people as a representative of the company, whether directly (sales) or indirectly (advertising, public relations, research or management). Therefore it is important for marketing people to be able to relate well with others and have good communications skills in speaking, writing and making presentations.

After graduation your choice of careers will be very broad. Likely you will start as a trainee and your employer will give you experience in many different marketing areas. Then, how quickly you advance will depend on you. Canadian industry needs professional marketing people: people who can improve business by looking at it from the customer's point of view; people who are not only dissatisfied with yesterday's products and policies, but who can adapt to constant change.

JOB DESCRIPTIONS:

Assistant to Product Manager—The graduate assists in developing product objectives and marketing strategy and deals with the issues of promotion, pricing, distribution, product packaging, content and design.

Retail Management Trainee—Graduates frequently enter training programs offered by progressive retailers and, with minimum training, become capable of operating a department or branch. This involves employee management, merchandising, controls, promotion management and store layout and design. Alternative jobs include buying and promotion.

Marketing Researcher—The graduate develops research instruments to achieve specific research objectives, gathers the data, analyzes the results and plans action.

COURSES:

SEMESTER 1 15 WEEKS

ACC100	Introduction to Accounting I
EDP100	Introduction to Computer Programming
ENG101	Language and Communications
MARK100	Introduction to Marketing
MATH100	Business Mathematics
PD100	Introduction to Physical Distribution

SEMESTER 2 19 WEEKS

In semesters 2 and 3, students must elect to take one of three math courses on advice from the department head.

ENG102	Language and Communications
MARK101	The Sales Aspect of Marketing
MARK102	Advertising and Sales Promotion
PSY106	Human Relations
ELECT000	Elective
ELECT001	Elecmath

SEMESTER 3 15 WEEKS

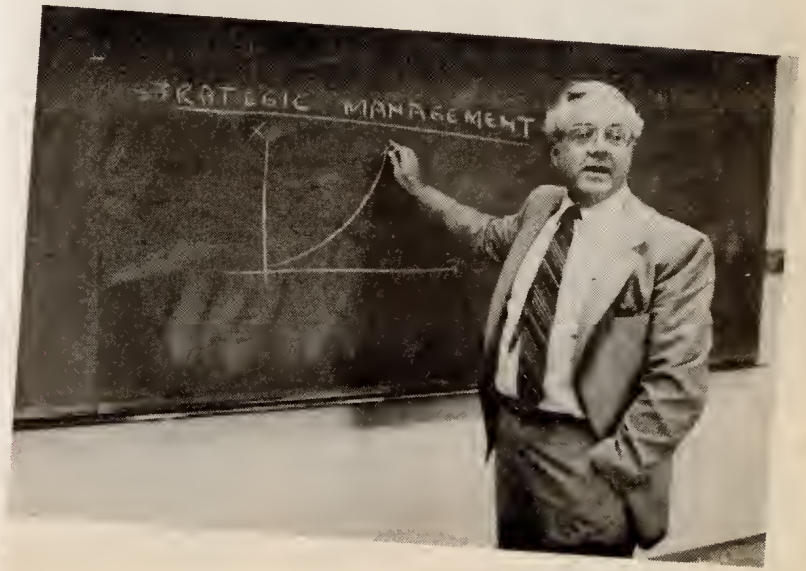
ENG201	English and the Business World
MARK200	Product Planning and Pricing Policies
MARK201	Distribution Channel Operations and Systems
MARK202	Marketing Research and Information Systems
ELECT000	Elective
ELECT001	Elecmath

SEMESTER 4 19 WEEKS

BUS215	Job Search Skills
MARK204	Public Relations and Publicity
MARK205	Marketing Management I
MARK206	Marketing Management II
MARK207	Marketing Management III
ELECT000	Elective

ELECTIVES:

ACC102	Accounting for Decision Making
BUS116	Travel Planning I
BUS121	Women in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
MATH214	Statistics I
MATH215	Statistics II
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
TYP103	Typing for Beginners
TYP152	Advanced Typing
SOC126	Political Sociology: Continuing Social Issues
BUS227	Travel Planning II
LAW200	Commercial Law
LAW201	Business Law
MATH253	Quantitative Methods
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature
SBM166	Small Business Management I



Business–General

GBC Code B109D **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent.

ABOUT THE PROGRAM: This program is designed for the student who seeks a broad, well integrated education in the field of business, as well as the opportunity to concentrate on more than one major subject area. In the second, third and fourth semesters, considerable flexibility is provided in that students select courses from other business options, under the guidance of faculty members.

CAREER PROSPECTS: Career prospects in management trainee positions are available in a wide range of organizations such as governments, financial institutions, public institutions, public utilities, merchandising, manufacturing, small business cooperatives and labour unions.

COURSES:

SEMESTER 1	15 WEEKS
ACC100	Introduction to Accounting I
EDP100	Introduction to Computer Programming
ENG101	Language and Communications
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Physical Distribution

SEMESTER 2	19 WEEKS
ENG102	Language and Communications
MATH115	Business Mathematics
PSY106	Human Relations
ELECT000	Elective
ELECT000	Elective
ELECT000	Elective

SEMESTER 3	15 WEEKS
ENG201	English and the Business World
MATH214	Statistics I
PSY161	Introductory Psychology
ELECT000	Elective
ELECT000	Elective
ELECT000	Elective

SEMESTER 4	19 WEEKS
BUS215	Joh Search Skills
ELECT000	Elective
ELECT000	Elective
ELECT000	Elective
ELECT000	Elective
ELECT000	Elective

ELECTIVES:

ACC102	Accounting for Decision Making
BUS116	Travel Planning I
BUS121	Women in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
MATH214	Statistics I
MATH215	Statistics II
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
TYP103	Typing for Beginners
TYP152	Advanced Typing
SOC126	Political Sociology: Continuing Social Issues
BUS227	Travel Planning II
LAW200	Commercial Law
LAW201	Business Law
MATH253	Quantitative Methods
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature
SBM166	Small Business Management I

Physical Distribution

GBC Code B109E **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent.

ABOUT THE PROGRAM: Physical Distribution has developed into an important and necessary business activity that is concerned with the economic and efficient movement of raw materials and supplies into the manufacturing plant, as well as the distributing of finished goods to the consumer. In the two-year physical distribution program students get a thorough grounding in the processes involved in moving goods from producer to consumer, at the local, national, and international level.

CAREER PROSPECTS: The economical distribution of products and services is of major importance in Canada's modern economy. Careers exist in business and industry in wholesaling, retailing, manufacturing and service operations as well as with various governmental agencies and institutions such as hospitals and schools.

JOB DESCRIPTIONS:

Physical Distribution Analyst—The analyst's responsibility is to investigate and improve the efficiency of an organization's distribution system. This could involve recommending the best location and size for a new warehouse; investigating the rates and qualities of various transportation methods; recommending optimum quantities to ship.

Purchasing Agent—The purchasing agent's responsibility is to seek the best suppliers in terms of price, quality, delivery, and service; then, using past records and forecasts of future needs, to order the most economical quantities that minimize total inventory cost.

Traffic Freight Analyst—An excellent job opportunity is found in the various fields of transportation. There is potential for moving up in various aspects such as distribution management, claims or insurance, inventory control, freight handling and storage, shipping and receiving, trucking operations, terminal supervision, rating, freight and dispatching.

Other job titles include inventory co-ordinator, import/export agent, distribution centre supervisor, customer service representative and traffic rate analyst.

COURSES:

SEMESTER 1	15 WEEKS
ACC100	Introduction to Accounting I
EDP100	Introduction to Computer Programming
ENG101	Language and Communications
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Physical Distribution

SEMESTER 2	19 WEEKS
ENG102	Language and Communications
MATH214	Statistics I
PD103	Warehousing Management
PD105	Inventory Control I
PSY106	Human Relations
ELECT000	Elective

continued on the next page

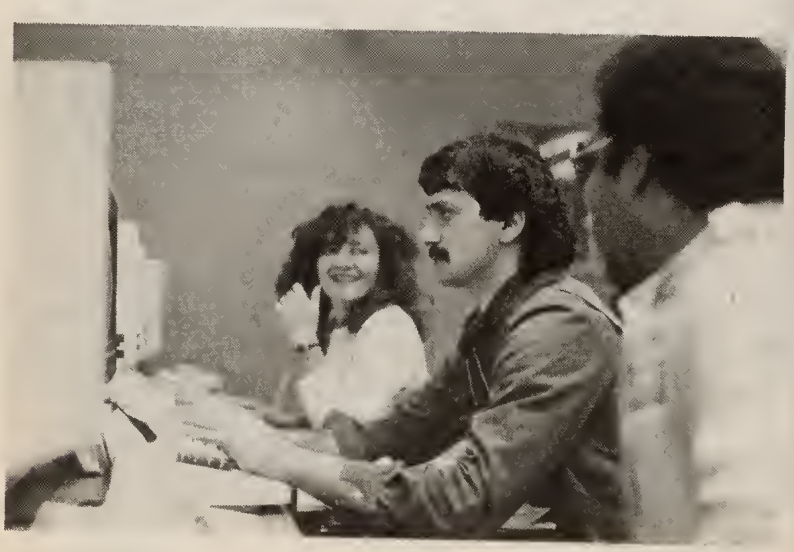
SEMESTER 3	15 WEEKS
ENG201	English and the Business World
PD202	Physical Distribution Systems—Management I
PD203	Traffic and Transportation Management I
PD204	Industrial Purchasing
ELECT000	Elective
ELECT000	Elective

ELECTIVES:

ACC102	Accounting for Decision Making
BUS116	Travel Planning I
BUS121	Women in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
MATH214	Statistics I
MATH215	Statistics II
PSY106	Human Relations
PSY161	Introductory Psychology

SEMESTER 4	19 WEEKS
BUS215	Job Search Skills
PD205	Physical Distribution Systems—Management II
PD206	Inventory Control II
PD207	Traffic and Transportation Management II
ELECT000	Elective
ELECT000	Elective

PSY162	Social Psychology
PSY211	Human Resources Development
TYP103	Typing for Beginners
TYP152	Advanced Typing
SOC126	Political Sociology: Continuing Social Issues
BUS227	Travel Planning II
LAW200	Commercial Law
LAW201	Business Law
MATH253	Quantitative Methods
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature
SBM166	Small Business Management I



BUSINESS ADMINISTRATION—ACCOUNTING

GBC Code B109F **Starting:** September
St. James Campus **Certification:** Diploma
6 Semesters

ADMISSION REQUIREMENTS: Two-year Business Accounting Diploma taken at George Brown College. Graduates of equivalent programs taken at other educational institutions may also qualify for admission.

ABOUT THE PROGRAM: This program is for students who desire more advanced study in business administration with concentration in accounting and finance. It integrates the student's more advanced learning into a broader view of an organization as a whole. In addition, students increase their specialized knowledge through major fields of study. Advanced decision-making, planning and managerial skills are developed through the use of modern learning techniques.

CAREER PROSPECTS: Students with these advanced credentials have greater job opportunities in many business and government organizations at levels higher than a graduate from a two-year (4 semester) program.

Graduates from the accounting and finance option will receive training to become effective accounting personnel. Emphasis will be on both practical training and theory. Practical training will provide the graduate with the technical expertise to be of immediate value to an employer. Accounting and related theory will facilitate the graduate's professional studies.

COURSES:

SEMESTER 5	15 WEEKS
BUS320	Organizational Behaviour
BUS321	Financial Management
BUS326	Faculty Directed Research I
ACC300	Management Accounting
ACC301	Taxation

SEMESTER 6	19 WEEKS
BUS328	Management Practice
BUS324	Canadian Business Policy and Strategy
BUS327	Faculty Directed Research II
ACC302	Internal Auditing
ACC303	Finance

Business Administration–Data Processing

GBC Code B109G
St. James Campus
6 Semesters

Starting: September
Certification: Diploma

ADMISSION REQUIREMENTS: Two-year Business Data Processing Diploma taken at George Brown College. Graduates of equivalent programs taken at other educational institutions may also qualify for admission.

ABOUT THE PROGRAM: This program is for students who desire more advanced study in business administration with concentration in programming. It integrates the student's more advanced learning into a broader view of an organization as a whole. In addition, students increase their specialized knowledge through major fields of study. Advanced decision-making, planning and managerial skills are developed through the use of modern learning techniques.

CAREER PROSPECTS: Students with these advanced credentials have greater job opportunities in many business and government organizations at levels higher than a graduate from a two-year (4 semester) program.

Graduates from the programming and analysis option will be able to write computer programs in a variety of languages and participate in system design.

COURSES:

SEMESTER 5	15 WEEKS
BUS320	Organizational Behaviour
BUS321	Financial Management
BUS326	Faculty-Directed Research I
EDP300	Assembler I
EDP302	Microcomputer Systems

SEMESTER 6	19 WEEKS
BUS328	Management Practice
BUS324	Canadian Business Policy and Strategy
BUS327	Faculty-Directed Research II
EDP301	Assembler II
EDP303	Data Base Concepts

Business Administration–Marketing

GBC Code B109H
St. James Campus
6 Semesters

Starting: September
Certification: Diploma

ADMISSION REQUIREMENTS: Two-year Business Marketing Diploma taken at George Brown College. Graduates of equivalent programs taken at other educational institutions may also qualify for admission.

ABOUT THE PROGRAM: This program is for students who desire a more advanced study in business administration with concentration in marketing management. It integrates the student's more advanced learning into a broader view of an organization as a whole. In addition, students increase their specialized knowledge through major fields of study. Advanced decision-making, planning and managerial skills are developed through the use of modern learning techniques.

CAREER PROSPECTS: Students with these advanced credentials have greater job opportunities in many business and government organizations at levels higher than a graduate from a two-year (4 semester) program.

Graduates from the marketing management option will be able to apply modern marketing techniques to advance the growth and profit of manufacturers and distributors of industrial and consumer products, and of service industries.

COURSES:

SEMESTER 5	15 WEEKS
BUS320	Organizational Behaviour
BUS321	Financial Management
BUS326	Faculty-Directed Research I
MARK300	Industrial Marketing Management
MARK303	Marketing Law

SEMESTER 6	19 WEEKS
BUS328	Management Practice
BUS324	Canadian Business Policy and Strategy
BUS327	Faculty-Directed Research II
MARK302	Marketing Management for Service Industries
MARK301	Management Information Systems

PROPERTY MANAGEMENT

GBC Code B114
St. James Campus
4 Semesters

Starting: September
Certification: Diploma

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent. All applicants are interviewed before acceptance.

ABOUT THE PROGRAM: Every successful company needs good managers—people who are willing to make decisions, see that work is done on time within a budget, and who know how to encourage their employees to give their top performance. The Property Management field is no exception. The curriculum of this program was developed by leaders of the property management industry and is intended to prepare students for certification in the public and private sectors. Emphasis will be placed on sound business administration, marketing, accounting, law, personnel management, and insurance, purchasing and inventory control, security and safety, resident relations, maintenance and housekeeping.

CAREER PROSPECTS: Graduates can expect to be employed as Property Managers in residential rental, social housing and residential condominium projects as well as in shopping centres and office building complexes.

COURSES:

SEMESTER 1 15 WEEKS

HOUS111	Housekeeping—Theory
HOUS112	Housekeeping—Practical
ACC111	Bookkeeping Practice
SEC111	Security and Safety
MAIN111	Maintenance—Theory
MAIN112	Maintenance—Practical, Electrical
LAW111	Law
ENG110	Language and Communications
MATH101	Mathematics
URB100	Urban Studies
PROP100	Introduction to Property Management
AIR110	Air Conditioning

SEMESTER 2 17 WEEKS

HOUS111	Housekeeping—Theory
HOUS112	Housekeeping—Practical
INV111	Purchasing and Inventory Control
ACC111	Bookkeeping Practice
SEC111	Security and Safety
REL111	Resident Relations
MAIN111	Maintenance—Theory
LAW111	Law
ENG111	Language and Communications
MATH101	Mathematics
URB100	Urban Studies
PSY102	Introductory Psychology
PLUM100	Plumbing
PRAC111	Management Practice (Co-op)

SEMESTER 3 15 WEEKS

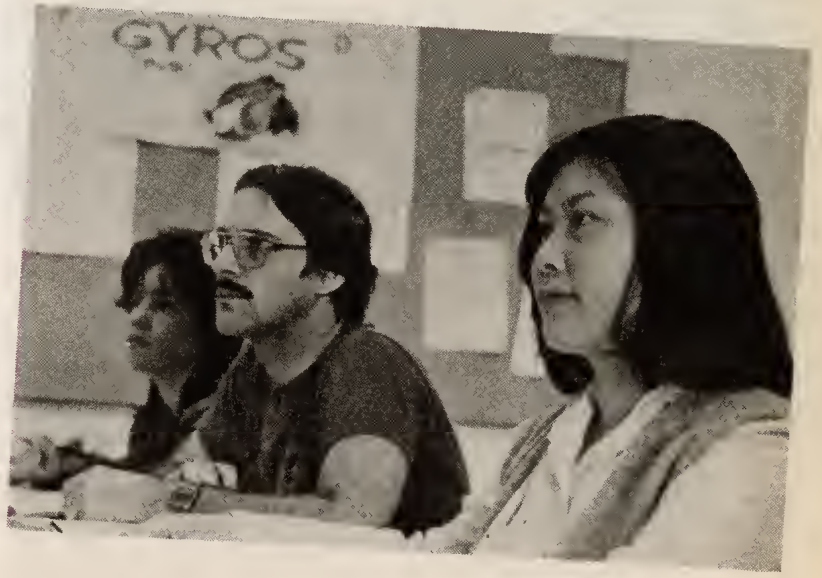
(Third semester includes one week work experience in industry.)

MARK211	Advertising and Sales Promotion
ACC213	Accounting
INS211	Insurance
REL211	Resident Relations
PERS211	Personnel Management
PROP211	Amenity and Common Area Management
LAW211	Law
PRAC211	Management Practice (Co-op)
PROP200	Condominium Management
PSY103	Business Psychology
PRAC213	Mortgage Administration

SEMESTER 4 17 WEEKS

(Fourth semester includes two weeks work experience in industry.)

MARK211	Advertising and Sales Promotion
ACC213	Accounting
INS211	Insurance
PERS211	Personnel Management
PROP211	Amenity and Common Area Management
LAW211	Law
PRAC211	Management Practice (Co-op)
PROP200	Condominium Management
PROJ200	Research Project
PRAC214	Introduction to Data Processing



Business Diploma–Insurance

GBC Code B118 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent.

ABOUT THE PROGRAM: This program is available to those students who wish to pursue careers in the property/casualty insurance industry. The graduate of the program will have a thorough theoretical knowledge of the basic principles and procedures of the business, with specific instruction in property insurance, liability insurance, automobile insurance as well as other coverages and business-related subjects.

After satisfying the examination requirements of the Insurance Institute of Canada and completing an appropriate period of practical employment in the industry, normally one year, the graduate becomes automatically eligible for election as an Associate of the Insurance Institute of Canada (AIIC), the first step towards the industry's highest professional designation, Fellow of the Insurance Institute of Canada (FIIC).

CAREER PROSPECTS:

Trainee Underwriter—Using rate manuals, and established procedures, a trainee underwriter reviews applications for limited amounts of coverage on simple risks. The trainee accepts or declines cases normally requiring limited technical knowledge or experience and refers complex and unusual risks to superiors.

Claims Representative—The representative handles claims promptly, equitably and economically within the provisions of the insurance contract; investigates damage or loss; negotiates and settles assigned claims within an authorized amount; produces reports on the results of all investigations and negotiations to the claims supervisor and recommends further action on claims exceeding his authority.

COURSES:

SEMESTER 1	15 WEEKS
ENG101	Language and Communications
MATH114	Business Mathematics
ACC100	Introduction to Accounting I
PSY106	Human Relations
INS100	Principles and Practice of Insurance
INS102	Automobile Insurance

SEMESTER 2	19 WEEKS
INS101	Insurance on Property I
INS103	Insurance on the Person
ENG102	Language and Communications
MATH115	Business Mathematics
MARK100	Introduction to Marketing
INS206	Casualty Covers

SEMESTER 3	15 WEEKS
INS200	Insurance on Property II
INS207	Burglary and Fidelity Insurance
ENG201	English and the Business World
MATH214	Statistics I
PSY211	Human Resources Development
ELECT000	Elective

SEMESTER 4	19 WEEKS
INS201	Insurance Against Liability
INS202	Loss Adjustments and Claims Settlements
EDP100	Introduction to Computer Programming
BUS215	Job Search Skills
LAW201	Business Law
ELECT000	Elective

ELECTIVES:

ACC102	Accounting for Decision-Making
BUS116	Travel Planning I
BUS121	Women in Business
BUS227	Travel Planning II
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
LAW200	Commercial Law
LAW201	Business Law
MATH214	Statistics I
MATH215	Statistics II
MATH253	Quantitative Methods
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
TYP103	Typing for Beginners
TYP152	Advanced Typing
SOC126	Political Sociology: Continuing Social Issues
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature
SBM166	Small Business Management I

Retail Management

GBC Code B120 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at or above the general level, or equivalent.

ABOUT THE PROGRAM: The purpose of the Retail Management Program is to prepare students to enter the field of retailing in a wide variety of job-entry occupations and, with experience, move upward into management levels. During this period, students are introduced to both theory and practice and strong emphasis is placed on practical application achieved through work experience.

Retail Management is a natural to be offered at the George Brown St. James Campus, located so close to Toronto's downtown retailers. Guest speakers, field trips, projects and assignments — all can be obtained or accomplished within a few blocks. Hopefully, many of the students will be able to fill their part-time employment requirements in a nearby store.

A condition of acceptance will be that students must obtain part-time employment in retailing within the first year of the program, completing not less than 150 hours of work experience.

CAREER PROSPECTS: Job entry positions include: retail sales clerk; stockroom clerk; advertising assistant; management trainee.

Career fulfillment occupations include: assistant store manager; store manager; area manager; store owner; buyer.

COURSES:

SEMESTER 1	15 WEEKS
SO100	Store Operations
MARK106	Market Analysis
DIST100	Distribution
ACC121	Accounting and Financial Management
DP100	Data Processing
ENG101	Language and Communications
MATH125	Mathematics of Merchandising

SEMESTER 2	19 WEEKS
SO100	Store Operations
SEL100	Selling
PROD100	Product Knowledge
INV112	Inventory Control
ACC121	Accounting and Financial Management
ENG102	Language and Communications
MATH214	Statistics I
ELECT000	Elective

SEMESTER 3	15 WEEKS
MAN200	General Management
MER200	Merchandising
SO200	Store Operations
BUY200	Buying
PERS102	Personnel Administration
ENG201	English and the Business World
ELECT000	Elective

SEMESTER 4	19 WEEKS
MAN200	General Management
BUS226	Location Appraisal
SEC112	Security
ADV200	Advertising and Promotion
BUY200	Buying
LAW213	Law
ELECT000	Elective

ELECTIVES:

ACC102	Accounting for Decision Making
BUS116	Travel Planning I
BUS121	Women in Business
BUS227	Travel Planning II
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French— Intermediate
FR102	Conversational French— Advanced
LAW200	Commercial Law
LAW201	Business Law
MATH214	Statistics I
MATH215	Statistics II
MATH253	Quantitative Methods
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
TYP103	Typing for Beginners
TYP152	Advanced Typing
SOC126	Political Sociology: Continuing Social Issues
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature
SBM166	Small Business Management I

Business Accounting

GBC Code B200 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English and mathematics in Grade 12 at or above the general level or mature student status subject to functional level testing.

ABOUT THE PROGRAM: This 52-week program enables the student to analyze and systematically record, in terms of money, business transactions and events of a financial nature, and of recording, summarizing, reporting, and interpreting the results.

CAREER PROSPECTS: Graduates are suitable for immediate employment in banking, with public accounting firms, in middle management capacities with large and small retail and wholesale businesses, or as cost analysts with manufacturers. The federal and provincial governments, with their complex regulations and taxing systems, seek community college accounting graduates for employment in the areas of financial management and taxation.

COURSES:

SEMESTER 1	12 WEEKS
ENG101	Language and Communications
MATH114	Business Mathematics
ACC100	Introduction to Accounting I
EDP100	Introduction to Computer Programming
MARK100	Introduction to Marketing
PD100	Introduction to Physical Distribution

SEMESTER 2	14 WEEKS
ENG102	Language and Communications
MATH115	Business Mathematics
PSY106	Human Relations
ACC101	Introduction to Accounting II
LAW200	Commercial Law

SEMESTER 3	12 WEEKS
ENG201	English and the Business World
ACC200	Financial Accounting I
ACC201	Management Information Systems
ACC202	Cost Accounting I
MATH214	Statistics I

SEMESTER 4	14 WEEKS
BUS215	Job Skills Search
ACC203	Financial Accounting II
ACC204	Cost Accounting II
ACC205	Auditing
MATH215	Statistics II

Court Reporting—Machine Shorthand

GBC Code B117 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at or above the general level, or equivalent, or mature student status. A typing speed of 40 wpm is also required.

SELECTION PROCEDURE: Applicants complete a questionnaire, write an English aptitude test, and are interviewed. Note: No previous knowledge of shorthand or typewriting is required. However, if the applicant has 45-50 wpm in typing and 120 wpm in machine shorthand, credits may be granted towards the first year of the program.

BACKGROUND: A high degree of manual dexterity and communication skills is strongly recommended. Related business experience, or successful completion of a recognized legal secretarial arts program would be beneficial.

ABOUT THE PROGRAM: The two-year Court Reporting — (Machine Shorthand) Program is an intensive course in verbatim reporting skills that includes, among other practical areas of study, actual experience in the courts working with an experienced court reporter. Upon successful completion of the program, graduates are eligible to write the Chartered Shorthand Reporters Association examination. The testing procedures used during the course are approved by this association.

Court reporting is a highly responsible and challenging position which involves verbatim recording and accurate transcription of judicial proceedings. Standards of excellence, dedication, and the ability to withstand long hours and pressure are qualities which the successful court reporter possesses. These qualities cannot be overemphasized as the outcome of a trial could be affected by the court reporter's transcript.

CAREER PROSPECTS: Graduates are prepared for careers in the Supreme, County, and Provincial Courts, Special Examiners' offices, and other government agencies. There are also many opportunities for those who wish to freelance.

COURSES:

SEMESTER 1	15 WEEKS
BUS112	Current Events
ENG124	English for Court Reporting
SHM120	Stenograph Machine Shorthand
TYP100	Typewriting

SEMESTER 2	19 WEEKS
BUS115	Current Events
ENG125	English for Court Reporting
SHM121	Stenograph Machine Shorthand
TYP101	Typewriting

SEMESTER 3	15 WEEKS
ENG216	English and the Legal World
BUS208	Legal, Medical, Latin and General Terminology
BUS222	Court Procedures
BUS224	Current Events
SHM206	Shorthand and Transcription

SEMESTER 4	19 WEEKS
ENG217	English and the Legal World
BUS209	Legal, Medical, Latin and General Terminology
BUS223	Field Work in the Courts
BUS225	Current Events
SHM207	Shorthand and Transcription

Court Reporting–Stenomask

GBC Code B444
St. James Campus
2 Semesters

Starting: September
Certification: Certificate

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at or above the general level, or equivalent or mature student status. A typing speed of 40 wpm is also required.

SELECTION PROCEDURE: Applicants complete a questionnaire, are tested in English, and are interviewed.

ABOUT THE PROGRAM: The one year Stenomask Program is designed to train students in verbatim reporting skills which include the repetition of what is said during court proceedings into a "mask" attached to a recording device, accurate transcription, other practical areas of study, and actual experience in the courts working with an experienced court reporter. A speed of 250 wpm is required.

Court reporting is a highly responsible and challenging position which involves verbatim recording and accurate transcription of judicial proceedings. Standards of excellence, dedication, and the ability to withstand long hours and pressure are qualities which the successful court reporter possesses. These qualities cannot be overemphasized as the outcome of a trial could be affected by the court reporter's transcript.

CAREER PROSPECTS: Stenomask reporting is an approved technique in certain courts and other judicial bodies. This program is in direct response to the request by the Ontario Government for the College to train stemomask reporters. Graduates are prepared for careers in the following areas: County Court, Criminal and Family Divisions of the Provincial Court, Special Examiners' offices, various Government agencies, and convention reporting. There are also many opportunities for those who wish to freelance.

COURSES:

SEMESTER 1	15 WEEKS
ENG401	English and the Legal World
BUS407	Legal, Medical, Latin and General Terminology
BUS408	Court Procedures
ENG409	Current Events
SH404	Stenomask and Transcription

SEMESTER 2	19 WEEKS
ENG404	English and the Legal World
BUS412	Legal, Medical, Latin and General Terminology
BUS411	Field Work in the Courts
ENG410	Current Events
SH405	Stenomask and Transcription

Computer Programmer

GBC Code B201
St. James Campus
4 Semesters

Starting: April, August, December and March
Certification: Diploma

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English and mathematics in Grade 12 at or above the general level or mature student status subject to functional level testing.

ABOUT THE PROGRAM: This 64-week program is designed to enable the student to develop proficiency in a variety of activities associated with the analysis, design, implementation and control of computerized information systems.

CAREER PROSPECTS: Graduates will be able to code computer programs in a variety of languages working under supervision from written specifications. The broad range of topics in the program will prepare the graduate for future advancement to more senior positions in systems analysis or management.

COURSES:

SEMESTER 1	16 WEEKS
ENG101	Language and Communications
MATH162	Mathematics for EDP
ACC100	Introduction to Accounting I
EDP100	Introduction to Computer Programming
EDP104	Management Information Systems
TYP103	Typing for Beginners
BUS183	Tutorial

SEMESTER 2	16 WEEKS
ENG102	Language and Communications
MATH163	Mathematics for EDP
PSY106	Human Relations
EDP101	COBOL I
EDP210	Systems Analysis and Design
EDP103	Programming I
BUS184	Tutorial

SEMESTER 3	16 WEEKS
ENG201	English and the Business World
MATH214	Statistics I
EDP200	COBOL II
EDP209	RPG II–Introductory
PD100	Introduction to Physical Distribution
BUS267	Tutorial
PSY211	Human Resources Development

SEMESTER 4	16 WEEKS
BUS215	Job Skills Search
EDP204	Advanced Programming
*	Computer Organization and Operating Systems
EDP208	Advanced EDP Topics
MATH253	Quantitative Methods
BUS268	Tutorial
MARK100	Introduction to Marketing

* Code pending.

Microcomputer Operator

GBC Code B510
St. James Campus
2 Semesters

Starting: September and March
Certification: Certificate

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at, or above, the general level or mature student status subject to a demonstrated Level III ability on functional level tests in English and mathematics. Typing speed of 30 wpm is required.

ABOUT THE PROGRAM: This 24-week program is designed to allow students to learn computer functions and applications. Emphasis is given to accounting and students learn its application on a computer. Included are word processing, data processing and microcomputers. Developing communication skills and updating mathematical abilities are also features of this program.

CAREER PROSPECTS: The graduate is suited for entry level positions at the secretarial level in businesses where automated equipment is presently used and which require people with hands-on expreience with computerized equipment.

COURSES:

SEMESTER 1	12 WEEKS
KB500	Keyboarding II through IV
ENG589	Business Communications 1
MATH579	Business Mathematics 1
ACC508	Introduction to Accounting
WORD510	Word Processing 1
BUS513	Document Preparation
DP501	Introduction to Data Processing

SEMESTER 2	12 WEEKS
KB501	Keyboarding II through IV
ENG590	Business Communications II
MATH580	Business Mathematics II
DP501	Introduction to Data Processing II
PRGM500	Microcomputers and Business Applications
BUS514	Document Preparation and Machine Transcription
ACC508	Introduction to Accounting

Computer Literacy–Business and Industry

GBC Code B511
St. James Campus
15 Weeks

Starting: May and September
Certification: Certificate

PREREQUISITES: Level 4 proficiency in mathematics and communicative skills. Mature students will be tested to equivalent proficiency.

ABOUT THE PROGRAM: This program offers an orientation to the use of computers in the business environment with particular emphasis on microcomputers.

Managerial concerns such as comparative evaluation of hardware and software, the role of users, and computer-related terminology are addressed in lectures and discussion.

Procedures for administrative and clerical interface with application software and for using data from a central resource are practised using microcomputers. Processes in defining, implementing and documenting computer-based solutions to business information problems are introduced and practised using structured design, decision tables, flowcharts, pseudocode and BASIC.

CAREER PROSPECTS: Graduates could find employment as clerks in a computerized environment, administrative assistants in a computerized office or as clerical workers in office and industrial operations. Positions for professionals re-entering the job market where computer literacy is required are also possible.

COURSES:

	15 WEEKS
PRGM501	Using Software Packages
BUS516	Problem Solving
PRGM502	Programming Languages
BUS517	Business Applications
PRGM503	Computers—Theory and Terminology

SALES

GBC Code B142 **Starting:** September
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics and English in Grades 11 and 12 at, or above, the general level, or equivalent.

BACKGROUND: Self-motivation and good communication skills are essential.

ABOUT THE PROGRAM: The one-year Sales Program provides the basics to start a successful career. The curriculum combines broad business and communications skills with the study of people and practical sales training using videotaped presentations. Upon completion of the program, the student should expect to find employment as a sales trainee, learning the needs of the employer's customers and the attributes of the firm's products or services. Alternatively, the sales graduate may continue into the second year of the Business Administration Program and work toward a Marketing or General Business Diploma.

CAREER PROSPECTS: On employment, the graduate will spend a training period learning about the employer's products or services, customers, and policies. The graduate's education is broad enough to speed up the training process and provide the understanding which leads to opportunities in sales, client service and customer relations.

JOB DESCRIPTION:

Salesperson in Training—A junior sales position while learning the technical aspects of the product and the customer use of the product. This leads to a higher paying senior sales position.

COURSES:

SEMESTER 1	15 WEEKS
ENG101	Language and Communications
MATH114	Business Mathematics
ACC100	Introduction to Accounting I
MARK100	Introduction to Marketing
MARK201	Distribution Channel Operations and Systems
PD100	Introduction to Physical Distribution

SEMESTER 2	19 WEEKS
ENG102	Language and Communications
MATH214	Statistics I
LAW201	Business Law
MARK101	The Sales Aspect of Marketing
PSY106	Human Relations
ELECT000	Elective

ELECTIVES:

ACC102	Accounting for Decision-Making
BUS116	Travel Planning I
BUS121	Women in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
MATH214	Statistics I
MATH215	Statistics II
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
TYP103	Typing for Beginners
TYP152	Advanced Typing
SOC126	Political Sociology: Continuing Social Issues
BUS227	Travel Planning II
LAW200	Commercial Law
LAW201	Business Law
MATH253	Quantitative Methods

SMALL BUSINESS ADMINISTRATION (POST BASIC)

GBC Code B445 **Starting:** September
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITE: Successful completion of a post-secondary technology program.

ABOUT THE PROGRAM: This program is designed for prospective managers and entrepreneurs to improve their management skills. Graduates of this program should have:

1. improved employment opportunities
2. increased chances for advancement
3. greater earnings potential, both present and future
4. the knowledge and skills necessary if you want to own your own business

The courses offered include studies in Marketing, Business Regulations, Retail Strategies, Money Management and Banking, Business Management, Using the Personal Computer and Business Case Studies.

CAREER PROSPECTS: Graduates should have the expectation and desire to become owners or managers of small businesses in their special fields of technology.

COURSES:

SEMESTER 1	15 WEEKS
ACC400	Company Financial Statements
BUS414	Company Organization and Business Regulations
MARK400	Marketing Your Business
BUS415	Retail Strategies
MAN400	Internal Business Management I
BUS416	Business—Case Studies I

SEMESTER 2	19 WEEKS
MAN401	Money Management and Banking
BUS417	Behavioural Sciences in Business
BUS418	Personal Communication and Sales
BUS419	Using the Personal and Business Computer
MAN410	Internal Business Management II
BUS426	Business—Case Studies II

OFFICE SYSTEMS ADMINISTRATION

GBC Code B121 **Starting:** September
St. James Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English and mathematics in Grades 11 and 12 at or above the general level, or equivalent, or mature student status subject to functional level testing.

ABOUT THE PROGRAM: This three-year diploma program allows students the opportunity to develop practical office and communication skills and supervisory techniques. Courses include those which give students hands-on training in word processing and information processing as well as a conceptual background in application of the latest technology in modern business with an emphasis on its integrated capabilities.

CAREER PROSPECTS: Any business possessing or converting to micro-chip technology to handle their information flow needs capable people who can direct or recommend systems. While the graduate of the office systems administration program is likely to begin in an entry level position, he or she will have developed the skills and knowledge for an eventual position in an administrative or management office position.

COURSES:

SEMESTER 1	15 WEEKS
KB100	Basic Keyboarding
BUS162	Office Systems
ENG101	Language and Communications
ACC152	Accounting I
MATH113	Business Mathematics
DP101	Introduction to Data Processing

SEMESTER 2	17 WEEKS
ENG104	Business Communication
BUS169	Document Preparation
WORD116	Word Processing I
ACC162	Accounting II
BUS167	Information Processing
ELECT000	Elective

SEMESTER 3	15 WEEKS
ENG204	Business Communication
MARK215	Introduction to Marketing
WORD216	Word Processing II
MATH214	Statistics I
PRGM238	Computer Operations
ELECT000	Elective

SEMESTER 4	17 WEEKS
DIC206	Dictation and Transcription Techniques
ELS126	Speaking with Confidence
PRGM239	Programming in Basic
WORD217	Word Processing Applications
PSY106	Human Relations
ELECT000	Elective

SEMESTER 5	15 WEEKS
PRGM300	Microcomputers and Business Applications
MIS300	Management Information Systems
PERS300	Personnel Administration
BUS331	Electronic Communications
BUS332	Corporate Fitness and Stress Management
PSY211	Human Resources Development

SEMESTER 6	17 WEEKS
BUS329	Data Base
MAN300	Records Management
MAN301	Business Management
BUS330	Decision Theory and Problem Analysis
PRGM301	Computer Graphics
ELECT000	Elective

ELECTIVES:

ACC102	Accounting for Decision Making
BUS116	Travel Planning I
BUS121	Women in Business
BUS227	Travel Planning II
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
LAW200	Commercial Law
LAW201	Business Law
MATH214	Statistics I
MATH215	Statistics II
MATH253	Quantitative Methods
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
SOC126	Political Sociology: Contemporary Social Issues
TYP103	Typing for Beginners
TYP152	Advanced Typing
SBM166	Small Business Management 1

SECRETARIAL ARTS–GENERAL

GBC Code B105A **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at or above the general level, or equivalent, or mature student status subject to functional level testing.

ABOUT THE PROGRAM: The two-year Secretarial Arts Program gives students the opportunity to develop skills, abilities and knowledge which are needed in today's offices. Practical skills include keyboarding, word processing, shorthand, and transcription. The role of modern technology in the office in terms of information processing systems is stressed.

CAREER PROSPECTS: Entry level positions in business include most secretarial functions for which the graduate will be well suited. His or her training plus experience should lead to advancement in an organization, including positions as executive assistant and administrative assistant.

COURSES:

SEMESTER 1	15 WEEKS
ENG101	Language and Communications
MATH155	Business Mathematics I
KB100	Basic Keyboarding
SH104	Shorthand
BUS162	Office Systems
DP102	Introduction to Data Processing—Part I

SEMESTER 2	19 WEEKS
ENG104	Business Communication
MATH156	Business Mathematics II
SH106	Shorthand and Transcription—Part I
KB101	Keyboarding II
BUS169	Document Preparation
DP112	Introduction to Data Processing—Part II
ACC154	Introduction to Accounting—Part I

SEMESTER 3	15 WEEKS
ENG201	English and the Business World
BUS167	Information Processing
KB200	Keyboarding III
SH206	Shorthand and Transcription—Part II
WORD115	Word Processing 1A
ACC254	Introduction to Accounting—Part II
ELECT000	Elective

Choose 1 of the following 16 electives.

ACC102	Accounting for Decision Making
BUS116	Travel Planning I
BUS121	Women in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
MATH214	Statistics I
MATH215	Statistics II
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
SOC126	Political Sociology: Continuing Social Issues

SEMESTER 4	19 WEEKS
ENG204	Business Communication
BUS263	Secretarial Procedures
SH201	Applied Stenography
KB201	Keyboarding IV
WORD125	Word Processing 1B
DIC204	Dictaphone

SECRETARIAL ARTS–LEGAL

GBC Code B105B **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at or above the general level, or equivalent, or mature student status subject to functional level testing.

ABOUT THE PROGRAM: The two-year Legal Program is designed to help students develop strong basic skills in typing, shorthand, transcription, accounting, word processing, verbal and written communications, and office procedures, which are further developed and refined through the study, preparation and processing of legal correspondence and documentation.

Students are given a thorough foundation of legal terminology and office procedures in the litigation, family, corporate and commercial, real estate and estate areas of law. The traditional secretarial skills, combined with hands-on training on sophisticated word processing equipment and relevant applications, prepare highly qualified graduates who are capable of working effectively within the legal office environment.

CAREER PROSPECTS: Law firms and corporate legal departments are in constant need of qualified legal secretaries. Entry level positions include document preparation and general correspondence. College training and experience can lead to more involved activities often performed by para-legals and law clerks.

COURSES:

SEMESTER 1	15 WEEKS
ENG101	Language and Communications
MATH155	Business Mathematics I
KB100	Basic Keyboarding
SH104	Shorthand
BUS162	Office Systems
DP102	Introduction to Data Processing—Part I

SEMESTER 2	19 WEEKS
ENG104	Business Communication
MATH156	Business Mathematics II
SH106	Shorthand and Transcription—Part I
KB101	Keyboarding II
BUS169	Document Preparation
DP112	Introduction to Data Processing—Part II
ACC154	Introduction to Accounting—Part I

SEMESTER 3	15 WEEKS
ENG201	English and the Business World
LAW202	Business Law
OP206	Legal Office Procedures—Part I
SH207	Legal Shorthand and Transcription—Part I
WORD115	Word Processing 1A
KB200	Keyboarding III
ACC215	Legal Accounting (Introductory)

SEMESTER 4	19 WEEKS
ENG204	Business Communication
LAW203	Business Law
OP216	Legal Office Procedures—Part II
SH217	Legal Shorthand and Transcription—Part II
BUS262	Legal Machine Transcription—Part I
WORD208	Legal Word Processing
KB201	Keyboarding IV

SECRETARIAL ARTS–MEDICAL

GBC Code B105C **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at, or above, the general level, or equivalent, or mature student status subject to functional level testing.

ABOUT THE PROGRAM: The two-year Medical Secretarial Program gives students the opportunity to develop skills, abilities and knowledge which are needed in today's medical offices. Practical skills, including keyboarding, word processing, medical terminology and medical office procedures, are important parts of the program. The role of modern technology in the office in terms of information processing systems is stressed.

CAREER PROSPECTS: Machine transcriptionists, medical receptionists and secretarial positions in hospitals are some of the career possibilities open to graduates of this program. Other positions may include secretarial work in doctors' offices and clinics.

COURSES:

SEMESTER 1	15 WEEKS
ENG101	Language and Communications
MATH155	Business Mathematics I
KB100	Basic Keyboarding
BUS162	Office Systems
DP102	Introduction to Data Processing—Part I
WORD113	Word Processing Concepts
BUS165	Medical Terminology—Part I

SEMESTER 2	19 WEEKS
ENG104	Business Communication
MATH156	Business Mathematics II
KB101	Keyboarding II
BUS175	Medical Terminology—Part II
DP112	Introduction to Data Processing—Part II
ACC154	Introduction to Accounting—Part I
ELECT000	Elective
BUS169	Document Preparation

SEMESTER 3	15 WEEKS
ENG201	English and the Business World
KB200	Keyboarding II
BUS176	Medical Office Procedures—Part I
WORD115	Word Processing I (A)
ACC254	Introduction to Accounting—Part II
	*Medical Terminology—Part III
BUS166	Medical Machine Transcription
BUS167	Information Processing

SEMESTER 4	19 WEEKS
ENG204	Business Communication
	*Medical Office Practice—Part II
	*Medical Terminology—Part IV
KB201	Keyboarding IV
WORD125	Word Processing I (B)
	*Advanced Medical Transcription

* Code pending.

SECRETARIAL ARTS–WORD PROCESSING

GBC Code B110 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at or above the general level, or equivalent, or mature student status subject to functional level testing.

ABOUT THE PROGRAM: This two-year program emphasizes training on the most current video display, text-editing typing systems. The role of the word processor in today's electronic office system is examined as well as its relationship to data processing. Emphasis is also placed on supervisory and training techniques.

CAREER PROSPECTS: Graduates are suitable for immediate employment as word processing operators in a general office or in secretarial positions requiring general and specialized word processing knowledge. Experience can lead to supervisory positions.

COURSES:

SEMESTER 1	15 WEEKS
KB100	Basic Keyboarding
ENG101	Language and Communications
MATH155	Business Mathematics I
BUS112	Current Events
BUS162	Office Systems
DP102	Introduction to Data Processing—Part I
WORD113	Word Processing Concepts

SEMESTER 2	19 WEEKS
KB101	Keyboarding II
ENG104	Business Communication
BUS169	Document Preparation
BUS168	Trainee Techniques
MATH156	Business Mathematics II
DP112	Introduction to Data Processing—Part II
ACC154	Introduction to Accounting—Part I
ELECT000	Elective

SEMESTER 3	15 WEEKS
ENG201	English and the Business World
WORD114	Word Processing Operations—Part I
KB200	Keyboarding III
BUS167	Information Processing
ELECT000	Elective

SEMESTER 4	19 WEEKS
ENG204	Business Communication
WORD211	Centre Procedures
BSC101	Behavioural Science in Business
PERS212	Personnel Training
BUS266	Supervisory Techniques
WORD209	Word Processing Operations (Advanced)
KB201	Keyboarding IV

ELECTIVES:

ACC102	Accounting for Decision-Making
BUS116	Travel Planning I
BUS121	Women in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate
FR102	Conversational French—Advanced
MATH214	Statistics I
MATH215	Statistics II
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
SOC126	Political Sociology: Continuing Social Issues
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature

WORD PROCESSING OPERATOR

GBC Code B111 **Starting:** September and January
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at or above the general level, or equivalent, or mature student status subject to functional level testing. A typing speed of 40 wpm or more is also required.

ABOUT THE PROGRAM: This one-year program stresses word processing functions allowing students to develop a thorough working knowledge of the most up-to-date equipment. Included are written communication skills and data processing concepts which examine the integrated electronic information handling systems.

CAREER PROSPECTS: Graduates are acceptable for entry level positions in business requiring people capable of performing basic word processing functions. Entry Level secretarial positions which stress word processing capabilities are also suitable. Career advancement to supervisory levels is contingent on experience and/or further training.

COURSES:

SEMESTER 1	15 WEEKS
KB200	Keyboarding III
ENG101	Language and Communications
MATH155	Business Mathematics I
BUS162	Office Systems
WORD114	Word Processing Operations—Part I
DP102	Introduction to Data Processing—Part I
BUS169	Document Preparation

SEMESTER 2	19 WEEKS
KB201	Keyboarding IV
ENG122	Language and Communications
DP112	Introduction to Data Processing—Part II
MATH156	Business Mathematics II
WORD124	Word Processing Operations—Part II
BUS167	Information Processing
BSC101	Behavioural Science in Business

WORD PROCESSING—LEGAL

GBC Code B119 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at or above the general level, or equivalent, or mature student status subject to functional level testing.

ABOUT THE PROGRAM: The two-year Word Processing—Legal Program combines two specializations: legal office procedures and word processing. This program aims to develop strong basic skills in typing, machine transcription, accounting, word processing, verbal and written communications, and office procedures.

These basic skills are further developed and refined through the study, preparation and processing of legal correspondence and documentation. Students are given a thorough foundation of legal terminology and office procedures in the litigation, family, corporate and commercial, real estate and estate areas of law. Intensive training on sophisticated word processing equipment and relevant applications provide an opportunity to develop equipment competency.

CAREER PROSPECTS: Employment opportunities in legal offices currently exist and will continue to grow for graduates with sound knowledge and the skills required to efficiently utilize word processing equipment in this specialized area.

COURSES:

SEMESTER 1	15 WEEKS
ENG101	Language and Communications
MATH155	Business Mathematics I
KB100	Basic Keyboarding
WORD113	Word Processing Concepts
BUS162	Office Systems
BUS164	Introductory Terminology
DP102	Introduction to Data Processing—Part I

Choose 1 of the following 16 electives.

ACC102	Accounting for Decision Making
BUS116	Travel Planning I
BUS121	Women in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
FR100	Conversational French
FR101	Conversational French—Intermediate

SEMESTER 2	19 WEEKS
ENG104	Business Communication
KB101	Keyboarding II
MATH156	Business Mathematics II
BUS169	Document Preparation
BUS168	Trainee Techniques
DP112	Introduction to Data Processing—Part II
ACC154	Introduction to Accounting—Part I
ELECT000	Elective
FR102	Conversational French—Advanced
MATH214	Statistics I
MATH215	Statistics II
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
SOC126	Political Sociology: Continuing Social Issues

continued on the next page

SEMESTER 3	15 WEEKS
ENG201	English and the Business World
WORD114	Word Processing Operations—Part I
OP206	Legal Office Procedures—Part I
ACC215	Legal Accounting (Introductory)
LAW202	Business Law
KB200	Keyboarding III
BUS262	Legal Machine Transcription—Part I

SEMESTER 4	19 WEEKS
ENG204	Business Communication
WORD210	Legal Word Processing (Advanced)
LAW203	Business Law
OP216	Legal Office Procedures—Part II
BUS272	Legal Machine Transcription—Part II
KB201	Keyboarding IV

EXECUTIVE RECEPTIONIST

GBC Code B115 **Starting:** September
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English in Grades 11 and 12 at, or above, the general level, or equivalent, or mature student status subject to functional level testing.

ABOUT THE PROGRAM: This one-year program is designed to give students practice in developing strong communication and interpersonal skills. Basic keyboarding skills, knowledge of office systems and document preparation are other practical skills developed. In addition, the role of modern technology in today's business world is examined.

CAREER PROSPECTS: Entry level positions in business which require people capable of representing the company well and creating that important first impression are suitable for graduates of the program. Similar positions in large corporate offices would depend on work experience, including proven organizational abilities and maturity of self-expression.

COURSES:

SEMESTER 1	15 WEEKS
KB100	Basic Keyboarding
ENG101	Language and Communications
BUS162	Office Systems
BUS112	Current Events
BUS163	Personal Effectiveness—Part I
DP102	Introduction to Data Processing—Part I
MATH155	Business Mathematics I

SEMESTER 2	19 WEEKS
BUS169	Document Preparation
ENG122	Language and Communications
BUS173	Personal Effectiveness—Part II
KB101	Keyboarding II
MATH156	Business Mathematics II
DP112	Introduction to Data Processing—Part II
ACC154	Introduction to Accounting—Part I
BSC101	Behavioural Science in Business

WORD PROCESSING OPERATOR

GBC Code B507 **Starting:** Continuously
St. James Campus **Certification:** Certificate
8 Weeks

PREREQUISITES: 70% on the College's functional level test in English. Typing speed of 50 wpm is required.

ABOUT THE PROGRAM: The purpose of this program is to provide the student with the skills and knowledge to use word processing equipment, including memory devices, information storage, displays, etc.

Included in the course are concepts of word processing, typing development and dictaphone.

CAREER PROSPECTS: The graduate is suited for entry level secretarial positions in business where word processing is being used.

COURSES:

8 WEEKS	
WORD500	Basic Machine Operations
WORD501	Typing
WORD502	Concepts
WORD503	Machine Dictation
WORD512	Microcomputer Operations

COMMERCIAL REFRESHER

GBC Code B503 **Starting:** Continuously
St. James Campus **Certification:** Certificate
20 Weeks

PREREQUISITES: 60% on the College's functional level test in English. Students scoring below 40% in any section of the F.L.T. mathematics battery are required to attend a mathematics lab to make up the deficiencies. Typing speed of 30 wpm is required. Shorthand pre test is required for applicants to the shorthand option.

ABOUT THE PROGRAM: The purpose of this program is to upgrade previous training in typing and record-keeping and either shorthand, or machine transcription.

Included in the course are English and speed development in typing as well as office procedures. Emphasis is placed on the elective chosen, i.e. shorthand, dictaphone or typing.

CAREER PROSPECTS: The graduates are suited for entry level secretarial positions in business where they may use either shorthand, typing, dictaphone and office practice skills.

OPTIONS: Stenograph Refresher, Dicta Typist Refresher, Typing Refresher

COURSES:

20 WEEKS

Option 1—Stenograph Refresher

ENG510	Language and Communications —Refresher
SH503	Shorthand—Refresher
TYP503	Typing Production—Refresher
TYP503A	Typing Speed—Refresher
DIC510	Introductory Machine Transcription
BUS503	Business Skills

20 WEEKS

Option 2—Dicta Typist Refresher

ENG510	Language and Communications —Refresher
TYP503	Typing Production—Refresher
TYP503A	Typing Speed—Refresher
DIC511	Advanced Machine Transcription
BUS502	Business Skills

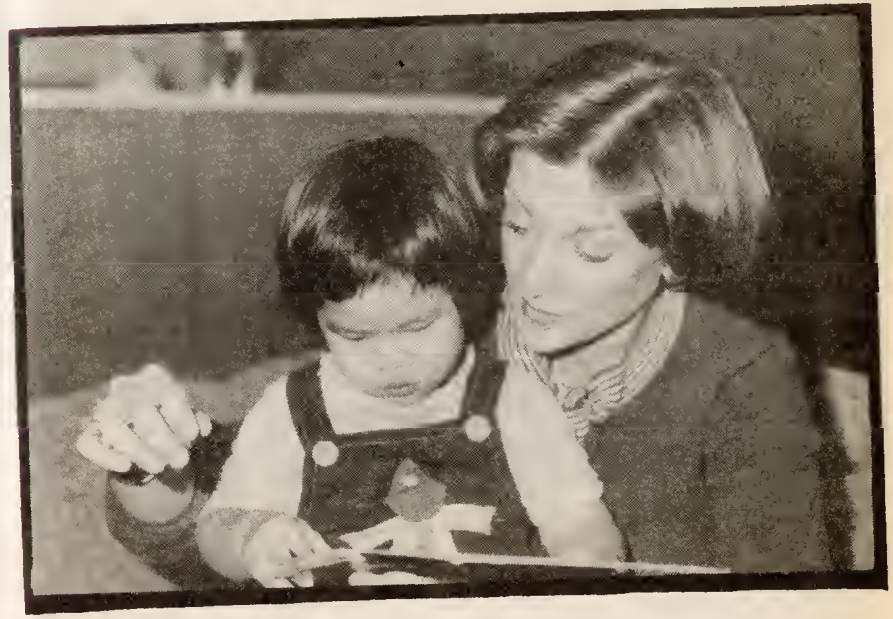
20 WEEKS

Option 3—Typing Refresher

Upon completion of DIC510—Introductory Machine Transcription, students may choose to undertake DIC511—Advanced Machine Transription to enhance their transcription speed and ability.

ENG510	Language and Communications —Refresher
TYP503	Typing Production—Refresher
TYP503A	Typing Speed—Refresher
DIC510	Introductory Machine Transcription
DIC511	Advanced Machine Transcription
BUS503	Business Skills

COMMUNITY SERVICES



CHILD CARE WORKER

GBC Code AP101 **Starting:** September
Nightingale Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in years 3 and 4 at, or above, the general level, or equivalent, with proficiency in English. Volunteer or work experience with older children and/or adolescents. A personal interview is required before acceptance into the program. A satisfactory medical examination is also required.

BACKGROUND: The ability to cope at a post secondary level in written and verbal communications is required. Minimum age—18 at date of registration.

ABOUT THE PROGRAM: The objectives of the program are to develop therapeutic skills and abilities in students, enabling them to work creatively with other professionals concerned with the treatment and rehabilitation of children and adolescents with problems. The academic subjects taken in the program are correlated closely with continuous supervised practical experience. The development of self-awareness and emotional maturity is emphasized as well as the ability to understand the degree of one's involvement with people.

Two days per week are spent in theory classes with the other three days at field placement. Field placements include psychiatric hospitals, group homes and special education classrooms. Students are expected to work shifts (not overnight) and may be requested to work one weekend per month.

Before entering Year 2, students are required to produce evidence that they have completed a Standard First Aid course.

This program is also available part-time.

CAREER PROSPECTS: Graduates find employment in treatment centres, group homes, hospitals, schools and community-based treatment programs.

COURSES:

SEMESTER 1	15 WEEKS
CHI160	Field Practice
CHI161	Human Growth and Development
CHI164	Caring for the Disturbed Child
CHI100	Interviewing and Counselling
PSY169	Introductory Psychology
CHI101	Therapeutic Activities
CHI172	Group Process I
CHI167	Student Group Seminar
CHI162	Health First Aid

SEMESTER 2	19 WEEKS
CHI160	Field Practice
CHI161	Human Growth and Development
CHI100	Interviewing and Counselling
CHI167	Student Group Seminar
SOC171	Introductory Sociology
CHI164	Caring for the Disturbed Child
CHI101	Therapeutic Activities
CHI166	Social Services

SEMESTER 3	15 WEEKS
CHI260	Field Practice
PSY261	Psychopathology of Childhood
CHI262	Caring for the Disturbed Child
CHI272	Working with Families
CHI267	Student Group Seminar
CHI268	Treatment Philosophies
CHI275	Adolescence
CHI279	Values, Ethics and Professionalism

SEMESTER 4	19 WEEKS
CHI260	Field Practice
PSY261	Psychopathology of Childhood
CHI262	Caring for the Disturbed Child
CHI268	Treatment Philosophies
CHI277	Integration of Theory and Practice
CHI278	Organizational Development
CHI267	Student Group Seminar
CHI276	Adolescent Role and Identity

Addiction Counsellor

GBC Code AP103 **Starting:** September
Nightingale Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in years 3 and 4 at, or above, the general level, or equivalent. A good command of verbal and written English is needed. A satisfactory medical examination is compulsory. Applicants are required to complete a questionnaire and attend a personal interview.

BACKGROUND: The course is primarily aimed at the older student with volunteer social service experience, post-high school work, or both. The person should be able to communicate well and to show empathy is preferred. Some knowledge of biology and chemistry is desirable.

ABOUT THE PROGRAM: This program prepares the student to be a counsellor in the mental health field with a special expertise in problems related to drug and alcohol dependencies and to serve a variety of individuals, agencies and communities.

The original concept of the program was developed by the Addiction Research Foundation of Ontario which, together with other agencies and organizations, continues to give guidance and advice. The program provides academic instruction (3 days per week during the first year and 2 days per week during the second year) in subjects related to human growth and behaviour, mental health, and the treatment of differing forms of addiction.

Part of the academic component of the program is experiential. Through group discussion and field work seminars, students have an opportunity to increase self-awareness, to develop their strengths and to gain insight into their limitations.

The field practicum provides at least two opportunities (2 days per week during the first year and 3 days per week during the second year) to practise therapeutic skills in a variety of settings and under the instruction and supervision of professional practitioners. The diploma requires a total of 1000 hours of supervised field work.

To ensure that the student learns to integrate academic knowledge with practical applications, members of the program staff provide individual supervision. Progress is discussed regularly with the students. Staff members or students may initiate additional consultations.

Before entering year 2, students are required to produce evidence they have completed a Standard First Aid course.

This program is also offered part-time.

CAREER PROSPECTS: Graduates find employment in a variety of settings such as the Donwood Institute, Addiction Research Foundation, halfway houses, detox centres, community centres, group homes, and agencies in the mental health and correctional fields.

COURSES:

SEMESTER 1	15 WEEKS
AD100	Field Practice
AD101	Human Growth and Behaviour I
AD102	Group Process I
AD103	Social Services, Problems and Issues
AD114	Basic Studies in Addiction I
AD106	Counselling Theory and Practice I
AD112	Field Work Seminar
SOC109	Sociology
ELECT000	Elective
Choose 1 of the following 2 electives	
ENG113	Language and Communications
ENG120	Preparatory English

Option 1

SEMESTER 3	15 WEEKS
(Students who have completed ENG120—Preparatory English in year 1 will register in Option 1 in year 2. Students who have completed ENG113—Language and Communications in year 1 will register in Option 2 in year 2.)	
AD200	Field Practice
AD201	Human Growth and Behaviour II
AD202	Group Process II
AD206	Counselling Theory and Practice II
AD208	Values, Ethics and Professionalism
AD214	Independent Studies
AD212	Field Work Seminar
ENG113	Language and Communications

Option 2

SEMESTER 3	15 WEEKS
AD200	Field Practice
AD201	Human Growth and Behaviour II
AD202	Group Process II
AD206	Counselling Theory and Practice II
AD208	Values, Ethics and Professionalism
AD214	Independent Studies
AD212	Field Work Seminar

SEMESTER 2	19 WEEKS
AD100	Field Practice
AD101	Human Growth and Behaviour I
AD102	Group Process I
AD115	Research Methodology
AD107	Counselling Practice Laboratory
AD106	Counselling Theory and Practice I
SOC109	Sociology
AD124	Basic Studies in Addiction II
AD112	Field Work Seminar
MED102	First Aid
ELECT000	Elective
Choose 1 of the following 2 electives	
ENG113	Language and Communications
ENG120	Preparatory English

SEMESTER 4	19 WEEKS
AD200	Field Practice
AD201	Human Growth and Behaviour II
AD202	Group Process II
AD206	Counselling Theory and Practice II
AD214	Independent Studies
AD211	Community Practice
AD212	Field Work Seminar
SOC207	Sociology
ENG113	Language and Communications
AD215	Physiology and Pharmacology

SEMESTER 4	19 WEEKS
AD200	Field Practice
AD201	Human Growth and Behaviour II
AD202	Group Process II
AD206	Counselling Theory and Practice II
AD214	Independent Studies
AD211	Community Practice
AD212	Field Work Seminar
SOC207	Sociology
AD215	Physiology and Pharmacology

Early Childhood Education

GBC Code AP105 **Starting:** September
Nightingale Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in years 3 and 4 at, or above, the general level or equivalent. Applicants are required to complete a questionnaire and have a personal interview. A satisfactory medical examination is required.

BACKGROUND: Experience of working with infants and young children is desirable, although not essential.

ABOUT THE PROGRAM: The program trains students to work with children aged six weeks to ten years in nursery and day care settings with both normal children and children with special needs. Emphasis is placed on skill development.

Each semester is divided into blocks of eight weeks. One eight-week block is for academic studies; the other is for field placement where students have the opportunity to work with children of all ages in a variety of settings.

Graduates receive an Early Childhood Education Diploma and are eligible, after two years' work experience, to apply for certification by the Association for Early Childhood Education of Ontario.

Before entering year 2, students are required to produce evidence they have completed a Standard First Aid course.

This program is also offered part-time.

CAREER PROSPECTS: The graduate may find employment in government and private day care centres and nursery schools. Opportunities also exist in pediatric playrooms, special education settings, junior kindergarten and therapeutic nursery programs.

COURSES:

SEMESTER 1	15 WEEKS
ECE100	Infant and Child Development
ECE101	Health and Nutrition
ECE103	Interpersonal Communications
ECE104	Principles of Day Care I
ECE105	Art Education
SOC106	Introductory Sociology
ECE118	Parent Education I
ECE116	Storytelling Literature
ECE110	Field Work Seminar
ECE113	Field Practice
ENG114	Language and Communications

SEMESTER 2	19 WEEKS
ECE100	Infant and Child Development
ECE101	Health and Nutrition
PSY107	Introductory Psychology
ECE103	Interpersonal Communications
ECE104	Principles of Day Care I
ECE105	Art Education
ECE111	Field Work Seminar
ECE117	Music
ECE114	Field Practice
ECE118	Parent Education I
ENG114	Language and Communications
MED102	First Aid

SEMESTER 3	15 WEEKS
ECE200	Human Growth and Development
ECE201	Children with Special Needs
ECE202	Curriculum Development
ECE204	History and Philosophy of ECE
ECE203	Planning Management and Legislation
ECE206	Family Dynamics
ECE207	Parent Education II
ECE208	Professional Development
ECE210	Field Work Seminar
ECE212	Field Practice
ECE216	Science Experience
ECE217	Principles of Day Care II

SEMESTER 4	19 WEEKS
ECE200	Human Growth and Development
ECE201	Children with Special Needs
ECE202	Curriculum Development
ECE204	History and Philosophy of ECE
ECE203	Planning Management and Legislation
ECE206	Family Dynamics
ECE207	Parent Education II
ECE208	Professional Development
ECE211	Field Work Seminar
ECE213	Field Practice
ECE215	Movement and Drama
ECE217	Principles of Day Care II

COMMUNITY WORKER

GBC Code AP107
Nightingale Campus
4 Semesters

Starting: September
Certification: Diploma

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in years 3 and 4 at, or above, the general level, or equivalent. Applicants are required to complete a questionnaire and have a personal interview. A satisfactory medical examination is required.

BACKGROUND: Extensive life experience, belief in the involvement of people in decision-making, commitment to social change amd previous community involvement are assets. The ability to communicate verbally and in writing is essential.

ABOUT THE PROGRAM: The Community Worker Program enables people with experience in community work or other community involvement to enhance and develop their knowledge and skills. It has been developed in consultation with experienced community workers representing grass-roots community groups and public and private agencies.

The program consists of classroom instruction and field work practice. Emphasis is placed on developing greater understanding and insight based on life experience and on learning by sharing ideas and experiences. Each student is expected to be mature and self-directing and to assume the major responsibility for his or her own learning. The community worker is a generalist who works primarily in a resource capacity with groups and individuals at the grass-roots level.

Before entering year 2, students are required to produce evidence they have completed a Standard First Aid course.

This program is also offered part-time.

CAREER PROSPECTS: Graduates are employed in community legal services, mental health services, cooperatives, community centres, ethnic communities and organizing services such as day care, programs for seniors and housing.

COURSES:

SEMESTER 1	15 WEEKS
CW100	Field Work
CW101	Field Work Seminar
CW102	Community Services and Resources
CW112	Community Work Theory and Practice 1
CW105	Group Process 1
CW113	Political Science 1
CW111	Communications and Understanding Media
SOC109	Sociology
CW109	Human Growth and Behaviour 1
ELECT000	Elective
Choose 1 of the following 2 electives	
ENG113	Language and Communications
ENG120	Preparatory English

SEMESTER 2	19 WEEKS
CW100	Field Work
CW101	Field Work Seminar
CW114	Business Administration
CW112	Community Work Theory and Practice 1
CW105	Group Process 1
CW113	Political Science 1
CW110	Human Growth and Behaviour II
SOC109	Sociology
MED102	First Aid
ELECT000	Elective
Choose 1 of the following 2 electives	
ENG113	Language and Communications
ENG120	Preparatory English

Option 1

SEMESTER 3	15 WEEKS
(Students who have completed ENG120—Preparatory English in year 1 will register in Option 1 in year 2. Students who have completed ENG113—Language and Communications in year 1 will register in Option 2 in year 2.)	
CW212	Community Work Theory and Practice II
CW200	Field Work
CW201	Field Work Seminar
CW213	Political Science II
CW215	Analysis of Service Systems
CW211	Aged in the Community
CW205	Group Process II
ENG113	Language and Communications

SEMESTER 4	19 WEEKS
CW212	Community Work Theory and Practice II
CW200	Field Work
CW201	Field Work Seminar
CW214	Co-op Management Studies
CW213	Political Science II
CW205	Group Process II
CW210	Community Legal Studies
ENG113	Language and Communications

Option 2

SEMESTER 3	15 WEEKS
CW212	Community Work Theory and Practice II
CW200	Field Work
CW201	Field Work Seminar
CW213	Political Science II
CW215	Analysis of Service Systems
CW211	Aged in the Community
CW205	Group Process II

SEMESTER 4	19 WEEKS
CW212	Community Work Theory and Practice II
CW200	Field Work
CW201	Field Work Seminar
CW214	Co-op Management Studies
CW213	Political Science II
CW205	Group Process II
CW210	Community Legal Studies

ACTIVATION CO-ORDINATOR

GBC Code AP109 **Starting:** September
Nightingale Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grade 12 general English. Volunteer or work experience with older people or with the handicapped; satisfactory personal interview.

ABOUT THE PROGRAM: The objective of the program is to develop therapeutic skills for persons seeking to become employed in activity programming in either institutional or community settings providing services for elderly and/or handicapped persons.

The program incorporates both an academic and an experiential component.

The three-day per week academic component encompasses the scientific study of the problems of aging in all its aspects while the two-day per week experiential component offers the student the opportunity to integrate theory with practice in an institution or community setting under the close supervision of a professional practitioner.

The activation co-ordinator encourages his/her patients to follow useful and interesting pursuits and to adapt a sound mental attitude towards aging itself through the use of effective programming.

Before entering year 2, students are required to produce evidence they have completed a Standard First Aid course.

This program is also offered part-time.

CAREER PROSPECTS: The increasing population of older people has created a growing demand for workers with knowledge and skills specific to the needs of later life. Graduates may seek employment in nursing homes, homes for the aged, retirement homes, day care centres for seniors and community-based service agencies.

COURSES:

SEMESTER 1	15 WEEKS
ACT107	Group Process
ACT103	Ambulation and Exercise
GERI100	Geriatric Impairments
ACT105	Use of Crafts and Hobbies
ENG128	Communications 1
FLDW101	Field Work Seminar
FLDP101	Field Practice
PSY169	Introductory Psychology

SEMESTER 2	19 WEEKS
ACT102	Working with the Handicapped
ACT104	Activity Planning
ACT100	Growth & Development
PSY114	Psycho-Social Needs
FLDW102	Field Work Seminar
FLDP102	Field Practice
SOC172	Introductory Sociology
ACT108	Adult Learning Skills
MED102	First Aid

SEMESTER 3	15 WEEKS
ACT210	Organizational Management Skills 1
ACT209	Special Purpose Groups
ACT212	Psycho-Geriatrics 1
ACT106	Normalization and Remotivation
FLDW203	Field Work Seminar
FLDP203	Field Practice
ACT208	Assessment Skills
ACT214	Counselling Skills

SEMESTER 4	19 WEEKS
ACT213	Psycho-Geriatrics II
ACT211	Organizational Management Skills II
CS200	Coordination Skills
PDE200	Program Development and Evaluation
FLDW204	Field Work Seminar
FLDP204	Field Practice
ACT215	Community Resources

NURSERY AIDE

GBC Code AP551 **Starting:** September, January and April
Nightingale Campus **Certification:** Certificate
16 Weeks

PREREQUISITES: Grade 10 or equivalent. All applicants are required to have a personal interview with the co-odinator of the program. Recent chest x-ray required.

ABOUT THE PROGRAM: The Nursery Aide Program is a 16-week, full-time day program offered three times a year at the Kensington Campus. The program is designed to train students to work as junior teachers or teaching assistants in day care centres and nursery schools. The nursery aide student will be engaged in the care and guidance of infants, toddlers and pre-schoolers under the direction of qualified supervisors. It is often necessary to lift a child or move materials and equipment. Because the adults in a nursery must work well together, it is essential that positive mental health habits are practised.

In order to gain practical experience and to have the opportunity to observe young children, students are placed in day nurseries in the community.

CAREER PROSPECTS: Graduates find employment as junior teachers or teaching assistants in day care centres, nursery schools and private homes.

COURSES:

16 WEEKS	
NA532	Guidance Methods
NA533	Programs—Routines and Play
NA535	Child Development
NA539	Creative Activities with Children
NA543	Skills Assessment Seminar
NA544	Basic Employment Skills
NA545	Application of Theory to Practice
NA546	Personal Communications
NA548	Health and Nutrition
ENG504	Business Practices and Communications (Part B)
NA537	First Aid

HEALTH CARE AIDE

GBC Code AP753
Nightingale Campus
16 Weeks

Starting: September, January and March
Certification: Certificate

PREREQUISITES: Grade 10. Mature persons 19 years and over with less than Grade 10 will be assessed and considered individually. Facility with English. A personal interview is required.

ABOUT THE PROGRAM: This program provides the basic training necessary for those who wish to work with patients in long-term or chronic care facilities.

Graduates of the program work under the supervision of a registered nurse or registered nursing assistant. The health care aide is expected to provide personal care for the comfort and safety of residents and be involved in the process of creating a climate to promote the optimal physical, social and emotional well-being of each resident. In addition, the health care aide observes, reports and assists in maintaining records of changes in condition of residents and thus shares in the responsibility for the total care of the residents.

The Health Care Aide Program was developed and is recognized by the Ministry of Health, the Ministry of Colleges and Universities and the Ministry of Community and Social Services.

CAREER PROSPECTS: Health care aides find employment in chronic care institutions, extended care facilities, nursing homes and homes for the aged as well as in private homes.

COURSES:

	16 WEEKS
CARE900	Communications
CARE901	Biological Needs
CARE903	Social and Emotional Needs
CARE908	Clinical I
CARE909	Clinical II
CARE910	Clinical III

ELECTRO-MECHANICAL TECHNOLOGY

Electrical Engineering Technician–Design

GBC Code EL101 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, including Grade 12 mathematics and English, or equivalent.

BACKGROUND: Credits in physics, electricity, and an electrical background is helpful but not essential.

ABOUT THE PROGRAM: The Electrical Design Technician Program is the same as the Electrical Technician Program for the first year and concentrates on the area of specialization for the second year.

Subjects covered include electrical fundamentals, DC and AC machines, industrial electronic controls, electrical lighting, power and auxiliary systems design, electrical drafting and related academic subjects. The program consists of lectures, laboratory and computer work designed to encourage the student to work on his/her own.

Upon completion of the program, the graduate will be capable of effective, independent function as a valuable member of the skilled labour force in the electrical design and consulting engineering field.

CAREER PROSPECTS: Graduates of the program could find employment: in a design office of consulting engineers or architects in the preparation of electrical drawings and layouts; in the design section of fixture companies responsible for lighting layouts and calculations; as salespeople for electrical equipment; in public utilities designing substations, transmission lines and distribution systems; and as a job supervisor to direct electrical installations.

COURSES:

SEMESTER 1	15 WEEKS
EL111	Electrical Fundamentals
EL113	Industrial Electronics I
EL116	Electrical Laboratory–DC Circuits
ELDR112	Electrical Drafting I
MATH117	Mathematics
MECH105	Engineering Science
ENG141	Language and Communications I

SEMESTER 2	19 WEEKS
EL121	Direct Current Machines
EL122	Electrical Circuits
EL156	Electrical Laboratory–AC Circuits
EL126	Control of DC Machines (Theory and Lab)
EL157	Electrical Laboratory–DC Machines
EL145	Industrial Electronics II (Theory and Lab)
MATH127	Mathematics
ELDR115	Electrical Drafting II
ENG182	Language and Communications II

SEMESTER 3	15 WEEKS
EL234	Electrical Distribution Systems
ELDR233	Advanced Drafting Techniques
EL237	Electrical Lab Distribution
ELDR234	Electrical Design Applications I
EL245	Wiring Methods and Electrical Code
EL251	Computer Programming
ELDR232	Electrical Drafting III
MATH227	Mathematics
ENG263	Language and Communications
EL265	Electrical Estimating

SEMESTER 4	19 WEEKS
ELDR246	Electrical Design Applications II
ELDR247	Installation and Branch Circuits
EL274	Auxiliary Systems
EL271	Alternating Current Machines
EL272	Electrical Lab AC Machines
EL253	Control of AC Machines
MATH237	Mathematics
ENG264	Language and Communications
ENG255	Technical Report

Electrical Engineering Technician

GBC Code EL102 **Starting:** September and October
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above, the general level, including Grade 12 mathematics and English or equivalent.

BACKGROUND: Credits in physics, electricity, and an electrical background are helpful but not essential.

ABOUT THE PROGRAM: Subjects covered include electrical fundamentals, DC and AC machines, industrial electronic controls, electrical drafting and related academic subjects. The program consists of lectures, laboratory and computer work designed to encourage the student to work on his/her own.

Upon completion of the program, the graduate will be able to effectively and independently function as a technician in the area of specialty required of him or her by their employer.

CAREER PROSPECTS: Graduates of this program could find employment as: electrical maintenance technicians in industries using machinery controlled by complex electronic equipment; test technicians in manufacturing plants; service technicians for electrical manufacturers; sales representatives; and design technicians for manufacturers.

continued on the next page

COURSES:

SEMESTER 1	15 WEEKS
ELI11	Electrical Fundamentals
ELI13	Industrial Electronic I
ELI16	Electrical Laboratory-D/C Circuits
ELDRI12	Electrical Drafting I
MATHI17	Mathematics
MECHI05	Engineering Science
ENGI41	Language and Communications I

SEMESTER 3	15 WEEKS
EL234	Electrical Distribution Systems
EL236	Industrial Electronic III
EL237	Electrical Lab Distribution
EL239	Industrial Electronic Lab III
EL245	Wiring Methods and Electrical Code
EL251	Computer Programming
ELDR232	Electrical Drafting III
MATH227	Mathematics
ENG263	Language and Communications

SEMESTER 2	19 WEEKS
ELI21	Direct Current Machines
ELI22	Electrical Circuits
ELI56	Electrical Laboratory—AC Circuits
ELI26	Control of DC Machines (Theory and Lab)
ELI57	Electrical Laboratory—DC Machines
ELI45	Industrial Electronic II (Theory and Lab)
ELDRI15	Electrical Drafting II
MATHI27	Mathematics
ENGI82	Language and Communications II

SEMESTER 4	19 WEEKS
EL232	Alternating Current Machines
EL252	Electrical Lab AC Machines
EL253	Control of AC Machines
EL254	Industrial Electronic IV
EL255	Industrial Electronic Lab IV
EL250	Electrical Environmental Systems
ELDR242	Electrical Drafting IV
EL248	Architectural/Mechanical Blue Print Reading
MATH237	Mathematics
ENG264	Language and Communications
ENG255	Technical Report

ELECTRICAL ENGINEERING TECHNICIAN

GBC Code EL202 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters (64 Weeks)

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in years 3 and 4 at or above the general level including year 4 mathematics and English, or equivalent.

BACKGROUND: An electrical background is helpful but not essential.

ABOUT THE PROGRAM: Subjects covered include electrical fundamentals, DC and AC machines, industrial electronic controls, electrical drafting and related academic subjects. The program consists of lectures, laboratory and computer work designed to encourage the student to work on his/her own.

Upon completion of the program, the graduate will be able to effectively and independently function as a technician in the area of specialty required of him or her by their employer.

CAREER PROSPECTS: Graduates could find employment as: electrical maintenance technicians in industries using machinery controlled by complex electronic equipment; test technicians in manufacturing plants; service technicians for electrical manufacturers; sales representatives; or design technicians for manufacturers.

COURSES:

SEMESTER 1	16 WEEKS
ELI11	Electrical Fundamentals
ELI13	Industrial Electronic I
ELI16	Electrical Laboratory—DC Circuits
ELDRI12	Electrical Drafting I
MATHI17	Mathematics
MECHI05	Engineering Science
ENGI41	Language and Communications I

SEMESTER 3	16 WEEKS
EL234	Electrical Distribution Systems
EL236	Industrial Electronic III
EL237	Electrical Lab Distribution
EL239	Industrial Electronic Lab III
EL245	Wiring Methods and Electrical Code
EL251	Computer Programming
ELDR232	Electrical Drafting III
MATH227	Mathematics
ENG263	Language and Communications

SEMESTER 2	16 WEEKS
ELI21	Direct Current Machines
ELI22	Electrical Circuits
ELI56	Electrical Laboratory—AC Circuits
ELI57	Electrical Laboratory—DC Machines
ELI26	Control of DC Machines (Theory and Lab)
ELI45	Industrial Electronic II (Theory and Lab)
ELDRI15	Electrical Drafting II
MATHI27	Mathematics
ENGI82	Language and Communications II

SEMESTER 4	16 WEEKS
EL232	Alternating Current Machines
EL252	Electrical Lab AC Machines
EL253	Control of AC Machines
EL254	Industrial Electronic IV
EL255	Industrial Electronic Lab IV
EL250	Electrical Environmental Systems
EL248	Architectural/Mechanical Blueprint Reading
ELDR242	Electrical Drafting IV
MATH237	Mathematics
ENG264	Language and Communications
ENG255	Technical Report

Electrical Engineering Technology

GBC Code EL107
Casa Loma Campus
6 Semesters

Starting: September
Certification: Diploma

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in years 3 and 4 at or above the general level including year 4 mathematics and English or equivalent.

BACKGROUND: An electrical background is helpful but not essential.

ABOUT THE PROGRAM: The Electrical Technology Program is constructed with a variety of subjects leading toward the independent design of equipment and systems. The curriculum includes lectures, laboratory, computer and design project work, aimed toward making the student able to work on his/her own with the guidance of instructors.

Upon completion of the program, the graduate will be competent to perform his/her duties as an electrical technologist and will be aware of the changing nature of business, industry, science and technology, society and education. The graduate will recognize the need to continually update and upgrade his or her technical skills and knowledge for a positive contribution to Canadian industry.

A progressive attitude is encouraged upon which a solid foundation of fundamental knowledge is built.

CAREER PROSPECTS: Graduates could find employment in: processing industries as designers or draftspersons; maintenance positions to keep production within acceptable limits; consulting engineering firms as electrical system designers; electrical contractors as estimators or in supervisory positions; manufacturing as quality control inspectors; marketing, design and servicing equipment or products in electrical utilities; designers and/or supervisors of substations, electrical networks or transmission lines; inspectors in government departments; and as educators.

COURSES:

SEMESTER 1	15 WEEKS
ELI11	Electrical Fundamentals
ELI13	Industrial Electronic I
ELI16	Electrical Laboratory—DC Circuits
ELDRI12	Electrical Drafting I
MATHI17	Mathematics
MECHI05	Engineering Science
ENGI4I	Language and Communications I

SEMESTER 2	19 WEEKS
ELI2I	Direct Current Machines
ELI22	Electrical Circuits
EL156	Electrical Laboratory—AC Circuits
EL157	Electrical Laboratory—DC Machines
EL126	Control of DC Machines (Theory and Lab)
EL145	Industrial Electronic II (Theory and Lab)
ELDR115	Electrical Drafting II
MATHI27	Mathematics
ENGI82	Language and Communications II

SEMESTER 3	15 WEEKS
EL234	Electrical Distribution Systems
EL236	Industrial Electronic III
EL237	Electrical Lab Distribution
EL239	Industrial Electronic Lab III
EL245	Wiring Methods and Electrical Code
EL25I	Computer Programming
ELDR232	Electrical Drafting III
MATH227	Mathematics
ENG263	Language and Communications

SEMESTER 4	19 WEEKS
EL232	Alternating Current Machines
EL252	Electrical Lab AC Machines
EL253	Control of AC Machines
EL254	Industrial Electronic IV
EL255	Industrial Electronic Lab IV
EL250	Electrical Environmental Systems
EL248	Architectural/Mechanical Blueprint Reading
ELDR242	Electrical Drafting IV
MATH237	Mathematics
ENG264	Language and Communications
ENG255	Technical Report

SEMESTER 5	15 WEEKS
EL343	Protection of Electrical Equipment
EL353	Electrical Lab Systems
EL344	Industrial Electronic V
EL345	Industrial Electronic Lab V
ELDR235	Electrical Drafting IIIA
EC100	Economics
MATH32I	Mathematics

SEMESTER 6	19 WEEKS
EL364	Electrical Machine Design
EL362	Electronic Instruments
EL365	Electrical Estimating
EL366	Research Assignment (Part of EL364)
EL367	Industrial Electronic VI
EL368	Industrial Electronic Lab VI
ELDR355	Electrical Drafting VA
MATH322	Mathematics
MECH203	Mechanisms
PHY200	Modern Physics

ELECTRONICS ENGINEERING TECHNICIAN

GBC Code EL103 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, including Grade 12 mathematics and English, or equivalent.

BACKGROUND: Credits in physics, drafting, electricity/electronics, mechanics, chemistry and computer programming would be useful. The technician is usually working with the customer, therefore, an ability to communicate effectively with others is essential.

ABOUT THE PROGRAM: The Electronics Technician Program provides both men and women with the opportunity to work in the maintenance, installation, production, design or research phases of the electronics industry. In order to better qualify the graduate for immediate productive work in industry, the program is designed so that in the second year the student specializes in one of the following area: communications, computers, ETV/TV broadcast.

CAREER PROSPECTS: Graduates of this program are now employed in research and engineering departments of government and industry, in utility companies, in radio and television broadcasting, in closed-circuit television studios, in the oil industry, and in the installation of computer and communication systems.

COURSES:

SEMESTER 1	15 WEEKS
ELTC140	Introduction to Electronics
ELTC141	Electrical Fundamentals Advanced
ELTC142	Network, Motor and Generators
ELTC146	Electronic Laboratory
ENG142	English and Communications
MATH141	Mathematics

SEMESTER 2	15 WEEKS
ELTC240	Applied Amplifier Circuits
ELTC143	Semiconductors, Devices and Circuits
ELTC145	Digital Principles
ELTC147	Electronic Laboratory
ENG143	English and Communications
MATH142	Mathematics

SEMESTER 3	15 WEEKS
ELTC144	AM/FM Modulation Principles and Receivers
ELTC208	Waveshaping Circuits
ELTC242	Microprocessors and System Applications
ELTC244	Electronic Laboratory
MATH241	Mathematics
ENG242	Language and Communications

SEMESTER 4	22 WEEKS
ELTC213	Communication Principles
ELTC105	TV Principles and Circuits
ELTC243	Analog/Digital Interfacing
ELTC245	Electronic Laboratory
ELTC299	Technical Report
ELTC203	Computer Aided Design
ENG243	English and Communications
ELECT000	Elective

Choose 1 of the following 3 electives

ELTC214	Communication Systems
ELTC216	Computer Systems
ELTC248	Video Systems

ELECTRONICS ENGINEERING TECHNICIAN

GBC Code EL203 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, including Grade 12 mathematics and English, or equivalent.

BACKGROUND: Credits in physics, drafting, electricity/electronics, mechanics, chemistry and computer programming would be useful. The technician is usually working with the customer, therefore, an ability to communicate effectively with others is essential.

ABOUT THE PROGRAM: The Electronics Technician Program provides both men and women with the opportunity to work in the maintenance, installation, production, design or research phases of the electronics industry. In order to better qualify the graduate for immediate productive work in industry, the program is designed so that in the second year the student specializes in one of the following areas: communications, computers, ETV/TV broadcast.

CAREER PROSPECTS: Graduates of this program are now employed in research and engineering departments of government and industry, in utility companies, in radio and television broadcasting, in closed-circuit television studios, in the oil industry, and in the installation of computer and communication systems.

COURSES:

SEMESTER 1	15 WEEKS
ELTC140	Introduction to Electronics
ELTC141	Electrical Fundamentals Advanced
ELTC142	Network, Motor and Generators
ELTC146	Electronic Laboratory
ENG142	English and Communications
MATH141	Mathematics

SEMESTER 2	15 WEEKS
ELTC240	Applied Amplifier Circuits
ELTC143	Semiconductors, Devices and Circuits
ELTC145	Digital Principles
ELTC147	Electronic Laboratory
ENG143	English and Communications
MATH142	Mathematics

SEMESTER 3	15 WEEKS
ELTC144	AM/FM Modulation Principles and Receivers
ELTC208	Waveshaping Circuits
ELTC242	Microprocessors and System Applications
ELTC244	Electronic Laboratory
MATH241	Mathematics
ENG242	Language and Communications

SEMESTER 4	19 WEEKS
ELTC213	Communication Principles
ELTC105	TV Principles and Circuits
ELTC243	Analog/Digital Interfacing
ELTC245	Electronic Laboratory
ELTC299	Technical Report
ELTC203	Computer Aided Design
ENG243	English and Communications
ELTC249	Microprocessors and Data Communications

ELECTRONICS ENGINEERING TECHNOLOGY

GBC Code EL105 **Starting:** September
St. James Campus **Certification:** Diploma
6 Trimesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Years 3 and 4 at, or above, the general level including year 4 mathematics and English, or equivalent.

BACKGROUND: Credits in physics, chemistry, drafting, electricity/electronics, mechanics and computer programming at level 4 and mathematics at level 5 would be useful.

ABOUT THE PROGRAM: This co-educational program was developed to meet the needs of industry for engineering technologists with a practical and theoretical knowledge who will be able to work effectively in the many areas of electronics. Technologists usually work on their own initiative, but under the general supervision of an engineer, a scientist or senior technologist. This program provides the student with a knowledge of advanced electronics based on quantitative analysis of electronic circuits and systems.

Because of the depth of knowledge required by the technologist, the College will review the student's progress at the end of the first semester to determine suitability for further technologist training. Those not qualifying, may be transferred to the Electronics Technician Program. Graduates of the program have the academic qualifications acceptable to the Ontario Association of Certified Engineering Technicians and Technologists for certification as an engineering technologist.

CAREER PROSPECTS: Graduates may be employed in many fields: design and construction of equipment; maintenance, repair, and installation of systems (computers, communication); quality control management; marketing and research.

COURSES:

SEMESTER 1	15 WEEKS
ELTC140	Introduction to Electronics
ELTC141	Electrical Fundamentals Advanced
ELTC142	Network, Motor and Generators
MATH151	Mathematics
ELTC146	Electronic Laboratory
ENG142	English and Communications

SEMESTER 2	15 WEEKS
ELTC231	Semiconductor Devices
ELTC148	Semiconductor Principles and Circuits
ELTC149	Advanced Transistors
ELTC151	Electronic Laboratory
ENG143	English and Communications
MATH152	Mathematics

SEMESTER 3	15 WEEKS
ELTC150	Logic Systems
ELTC230	Waveshaping and Control Devices
ELTC232	AM/FM Technology
ELTC233	Electronic Laboratory
MATH251	Mathematics
ENG242	Language and Communications

SEMESTER 4	15 WEEKS
ELTC235	Computer Technology
ELTC236	Communications Technology Part 1
ELTC237	Operational Amplifier Design
ELTC239	Electronic Laboratory
ELTC203	Computer Aided Design
PHY201T	Physics
ENG243	English and Communications

SEMESTER 5	15 WEEKS
ELTC301	Communications Technology Part II
ELTC306	Component Technology
ELTC311	Electronic Mechanical Design Principles
ELTC312	Electronic Laboratory
ENG300	Report Writing
MATH351	Mathematics

SEMESTER 6	15 WEEKS
ELTC315	Pulse Technology
ELTC314	System Design and Construction
ELTC303	Automatic Controls Systems
ELTC399	Technology Report
ELTC316	Laboratory
PHY202T	Modern Physics

ELECTRONICS–BASIC SKILLS

GBC Code EL542 **Starting:** Continuously
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: BTSD111 or equivalent

ABOUT THE PROGRAM: This program is designed to provide the graduate with the fundamental principles of electricity and electronics.

CAREER PROSPECTS: The program provides the graduate with a solid base for further training in one or more of the many phases of electronic specialization.

COURSES:

SEMESTER 1	24 WEEKS
ELTC502	Electrical Fundamentals
ELTC503	Semi-Conductor Devices and Circuits
ELTC504	Introduction to Radio Communication
ELTC505	Introduction to Audio and Video Principles
ELTC506	Introduction to Digital Techniques
ELTC507	Fundamentals Laboratory
ELTC538	Passive Circuit Analysis (Applied Math)
ENG503	Business Practices and Communications (Part A)

SEMESTER 2	12 WEEKS
ELTC511	Television System Introduction
ELTC512	Audio Systems Introduction
ELTC513	Applications Laboratory
ELTC539	Active Circuit Analysis (Applied Math)
ENG504	Business Practices and Communications (Part B)

ELECTRONICS–AUDIO EQUIPMENT AND SYSTEMS

GBC Code EL543 **Starting:** Continuously
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITE: BTSDI11 or equivalent.

ABOUT THE PROGRAM: This program provides a technically competent individual who has a broad foundation and understanding of audio systems. Through the application of developed skills and acquired knowledge attained during the program, the graduate will be prepared for employment and/or on-the-job training in the expanding audio field.

CAREER PROSPECTS: The graduate may find employment with radio and stereo retail stores and service shops, manufacturers and wholesalers of audio equipment as well as the audio recording and broadcasting industries.

COURSES:

SEMESTER 1	24 WEEKS
ELTC502	Electrical Fundamentals
ELTC503	Semi-Conductor Devices and Circuits
ELTC504	Introduction to Radio Communication
ELTC505	Introduction to Audio and Video Principles
ELTC506	Introduction to Digital Techniques
ELTC507	Fundamentals Laboratory
ELTC538	Passive Circuit Analysis (Applied Math)
ENG503	Business Practices and Communications (Part A)

SEMESTER 2	24 WEEKS
ELTC516	Acoustics
ELTC517	Microphones, Headphones, Loudspeakers
ELTC518	Record and Tapes Playing Systems
ELTC519	Audio Processors, Pre-amplifiers and Power Amps
ELTC520	FM Tuners, Stereo and Quadraphonic Multiplexing
ELTC522	Audio Studio Equipment
ELTC523	Audio Measurements Laboratory
ELTC539	Active Circuit Analysis (Applied Math)
ENG504	Business Practices and Communications (Part B)

ELECTRONICS–DIGITAL EQUIPMENT AND SYSTEMS

GBC Code EL544 **Starting:** Continuously
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITE: BTSDI11 or equivalent.

ABOUT THE PROGRAM: Graduates of this program are technically competent individuals who have a broad foundation and understanding of digital electronics. The program provides up to date coverage of digital principles, theory and devices.

CAREER PROSPECTS: The program will prepare the graduate for employment and further on-the-job training in the expanding field of digital electronics. This field includes such areas as personal computers, minicomputers and microprocessor based systems found throughout industry.

COURSES:

SEMESTER 1	24 WEEKS
ELTC502	Electrical Fundamentals
ELTC503	Semi-Conductor Devices and Circuits
ELTC504	Introduction to Radio Communication
ELTC505	Introduction to Audio and Video Principles
ELTC506	Introduction to Digital Techniques
ELTC507	Fundamentals Laboratory
ELTC538	Passive Circuit Analysis (Applied Math)
ENG503	Business Practices and Communications (Part A)

SEMESTER 2	24 WEEKS
ELTC546	Semi-Conductor Devices for Digital Circuits
ELTC547	Digital Techniques and Basic Logic Circuits
ELTC548	Sequential Logic Circuits
ELTC549	Combination Logic Circuits and Memories
ELTC550	Microprocessors I
ELTC551	Microprocessors II
ELTC552	Digital Applications Laboratory
ELTC539	Active Circuit Analysis (Applied Math)
ENG504	Business Practices and Communications (Part B)

ELECTRONICS–RADIO, HI-FI AND TV SERVICING

GBC Code EL545 **Starting:** Continuously
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITE: BTSD I I 1 or equivalent.

ABOUT THE PROGRAM: This program trains electronics service technicians who will be able to efficiently and systematically diagnose, locate and repair all faults in electronics home entertainment equipment.

CAREER PROSPECTS: The graduate may find employment with radio/television service shops, retail stores, wholesalers/distributors, television cable companies, or manufacturers of home entertainment equipment.

COURSES:

SEMESTER 1	24 WEEKS
ELTC502	Electrical Fundamentals
ELTC503	Semi-Conductor Devices and Circuits
ELTC504	Introduction to Radio Communication
ELTC505	Introduction to Audio and Video Principles
ELTC506	Introduction to Digital Techniques
ELTC507	Fundamentals Laboratory
ENG503	Business Practices and Communications (Part A)
ELTC538	Passive Circuit Analysis (Applied Math)

SEMESTER 2	24 WEEKS
ELTC562	AM and FM Radio Receivers
ELTC563	Television System Introduction
ELTC564	Pulse Circuits
ELTC565	Monochrome TV Receiver Circuits and Functions
ELTC566	Antennas, Transmission Lines, Cable Systems
ELTC567	Colour Transmission and Colour Picture Tubes
ELTC568	Colour Television Processing Circuits
ELTC569	Television Receiver Servicing Laboratory
ELTC539	Active Circuit Analysis (Applied Math)
ENG504	Business Practices and Communications (Part B)

ELECTRONICS–VIDEO TAPE RECORDER

GBC Code EL546 **Starting:** Continuously
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITE: BTSD III or equivalent (Grade 10).

ABOUT THE PROGRAM: This program trains electronics service technicians who will be able to diagnose, locate and repair faults in domestic video tape recorders and basic industrial video tape equipment. He/she will gain a working knowledge of video test equipment, switchers, special effects generators, editing equipment and other peripheral devices in current use by business, industry and individuals.

CAREER PROSPECTS: The graduate will be technically prepared for employment and/or on-the-job training in manufacturing, sales or service of video equipment. Opportunities also exist in audio-visual departments of government and business organizations.

COURSES:

SEMESTER 1	24 WEEKS
ELTC502	Electrical Fundamentals
ELTC503	Semi-Conductor Devices and Circuits
ELTC504	Introduction to Radio Communication
ELTC505	Introduction to Audio and Video Principles
ELTC506	Introduction to Digital Techniques
ELTC507	Fundamentals Laboratory
ELTC538	Passive Circuit Analysis (Applied Math)
ENG503	Business Practices and Communications (Part A)

SEMESTER 2	24 WEEKS
ELTC520	FM Tuners, Stereo and Quadrophonic Multiplexing
ELTC562	AM and FM Radio Receivers
ELTC563	Television System Introduction
ELTC524	VTR Theory
ELTC525	NTSC Transmission and Standards
ELTC526	NTSC Processing Circuits
ELTC527	Camera Basics
ELTC528	Video Lab
ELTC529	Introduciton to Production and Editing
ELTC539	Active Circuit Analysis (Applied Math)
ENG504	Business Practices and Communications (Part B)

Electronics–Office Systems Servicing

GBC Code EL577 **Starting:** Continuously
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: BTSD IV or equivalent (Grade 12) plus satisfactory performance on specified mechanical aptitude test.

ABOUT THE PROGRAM: This program provides a technically qualified individual who has a: broad foundation and understanding of electronics and electromechanical equipment as they relate to office automation and word processing; as well as basic understanding of computer programming, computer operating systems and telecommunications.

CAREER PROSPECTS: The program will prepare the graduate for employment and further on-the-job training as equipment service technicians in the rapidly expanding field of office automation and word processing. The job opportunities seem excellent especially in Toronto and other large metropolitan areas.

COURSES:

SEMESTER 1	26 WEEKS
ELTC502	Electrical Fundamentals
ELTC503	Semi-Conductor Devices and Circuits
ELTC504	Introduction to Radio Communication
ELTC509	Introduction to Digital Technology and Basic Logic Circuits
ELTC507	Fundamentals Laboratory
ELTC538	Passive Circuit Analysis (Applied Math)
ENG503	Business Practices and Communications (Part A)

SEMESTER 2	26 WEEKS
ELTC570	Integrated Circuits and Microprocessors for Office Systems
ELTC571	Software Preparation and Debugging
ELTC572	Peripherals and Interfacing of Office Equipment
ELTC573	Introduction to Telecommunications
ELTC574	Office Equipment System Lab (Troubleshooting)
ELTC539	Active Circuit Analysis (Applied Math)
ENG504	Business Practices and Communications (Part B)

Business Equipment Servicing

GBC Code EN541 **Starting:** Continuously
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Grade 10 or equivalent and satisfactory performance on specified mechanical aptitude tests.

ABOUT THE PROGRAM: Business Equipment Servicing is a training program providing hands on training on the commonly-used business machines found in business offices such as typewriters, photocopiers, dictating machines and figuring machines.

CAREER PROSPECTS: Repair and maintenance of mechanical typewriters, IBM Selectric typewriters, electronic typewriters, photocopiers, dictating machines, digital cash registers, scales, electronic calculators and microcomputers.

COURSES:

SEMESTER 1	24 WEEKS
ELTC530	Electrical and Electronics Fundamentals
BES500A	Typewriter Mechanical—Theory
ELTC504	Introduction to Radio Communication
ELTC505	Introduction to Audio and Video Principles
ELTC506	Introduction to Digital Techniques
ELTC533	Electronic Fundamentals Laboratory
ELTC540	Passive Circuit Analysis
ENG530	Industrial Communications
BES500C	Typewriter Electronic—Theory

SEMESTER 2	24 WEEKS
ELTC531	Semi-Conductors Devices and Circuits
ELTC534	Pulse and Digital Circuits
BES500B	Typewriter Mechanical—Practical
BES501	Figuring Machines
BES502	Photocopying Machines
BES503	Dictating Machines
ELTC545	Active Circuit Analysis
ENG530	Industrial Communications
BES500D	Typewriter Electronic—Practical

INSTRUMENTATION ENGINEERING TECHNICIAN–INDUSTRIAL

GBC Code EN101 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level including mathematics and English, or equivalent.

BACKGROUND: Credits in physics, drafting, electricity/electronics, mechanics, chemistry and computer programming would be useful. The technician is usually working with the customer, therefore, an ability to communicate effectively with others is essential.

ABOUT THE PROGRAM: The Instrumentation Technician works in all phases of industry using automatic controls.

Each instruction period is followed by one or more laboratory period to reinforce theory. The student is given a sound grounding in research and development to sales and service for instrument manufacturers.

CAREER PROSPECTS: Job opportunities range from positions in research and development to sales and service for instrument manufacturers.

COURSES:

SEMESTER 1	15 WEEKS
ELTC140	Introduction to Electronics
ELTC141	Electrical Fundamentals Advanced
ELTC142	Network, Motor and Generators
ELTC146	Electronic Laboratory
ENG142	English and Communications
MATH141	Mathematics

SEMESTER 2	15 WEEKS
ELTC240	Applied Amplifier Circuits
ELTC143	Semiconductors, Devices and Circuits
ELTC145	Digital Principles
ELTC147	Electronic Laboratory
ENG143	English and Communications
MATH142	Mathematics

SEMESTER 3	15 WEEKS
INST105	Measuring Principles I
INST104	Measuring Principles II
INST209A	Laboratory–Instrumentation
MATH241	Mathematics
ENG242	Language and Communications
CHEM100	Applied Chemistry
INST210	Automatic Control Principles I

SEMESTER 4	22 WEEKS
ELTC242	Microprocessors and System Applications
INST201	Final Control Elements
INST202	Analytical and Environmental Instrumentation
INS310	Automatic Control Principles II
ENG243	English and Communications
INST209B	Laboratory–Instrumentation
CHEM200	Industrial Chemistry and Equipment
INST299	Technical Report
ELTC209A	Laboratory Electronics

INSTRUMENTATION ENGINEERING TECHNICIAN–INDUSTRIAL

GBC Code EN200 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level including mathematics and English or equivalent.

BACKGROUND: Credits in physics, drafting, electricity/electronics, mechanics, chemistry and computer programming would be useful. The technician is usually working with the customer, therefore, an ability to communicate effectively with others is essential.

ABOUT THE PROGRAM: The Instrumentation Technician works in all phases of industry using automatic controls.

Each instruction period is followed by one or more laboratory period to reinforce theory. The student is given a sound grounding in research and development to sales and service for instrument manufacturers.

CAREER PROSPECTS: Job opportunities range from positions in research and development to sales and service for instrument manufacturers.

COURSES:

SEMESTER 1	15 WEEKS
ELTC140	Introduction to Electronics
ELTC141	Electrical Fundamentals Advanced
ELTC142	Network, Motor and Generators
ELTC146	Electronic Laboratory
ENG142	English and Communications
MATH141	Mathematics

SEMESTER 2	15 WEEKS
ELTC240	Applied Amplifer Circuits
ELTC143	Semiconductors, Devices and Circuits
ELTC145	Digital Principles
ELTC147	Electronic Laboratory
ENG143	English and Communications
MATH142	Mathematics

SEMESTER 3	15 WEEKS
INST105	Measuring Principles I
INST104	Measuring Principles II
ELTC209A	Laboratory–Electronics
INST209A	Laboratory–Instrumentation
MATH241	Mathematics
ENG242	Language and Communications
CHEM100	Applied Chemistry
ELTC242	Microprocessors and System Applications

SEMESTER 4	19 WEEKS
INST210	Automatic Control Principles I
INST201	Final Control Elements
INST202	Analytical and Environmental Instrumentation
INST310	Automatic Control Principles II
ENG243	English and Communications
INST209B	Laboratory–Instrumentation
CHEM200	Industrial Chemistry and Equipment
INST299	Technical Report

Instrumentation Engineering Technology–Industrial

GBC Code EN114 **Starting:** September
St. James Campus **Certification:** Diploma
6 Trimesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level including Grade 12 mathematics and English, or equivalent.

BACKGROUND: Credits in physics, drafting, electricity/electronics, mechanics and computer programming Grade 12 and mathematics Grade 13 would be useful. Grade 12 chemistry is highly recommended.

ABOUT THE PROGRAM: The Instrumentation Technologist works mainly in design and systems modification. Job opportunities range from challenging positions in research and development to sales and service for instrument manufacturers.

The Industrial Instrumentation Technology Program gives a six semester program in two years. Each instruction period is followed by one or more laboratory period to reinforce theory. The student is given a firm grounding in electronic instrumentation, pneumatic instrumentation, computer technology and related academic subjects.

CAREER PROSPECTS: The technologist's role in industry is primarily in system design and modification. However, the technologist may specialize in one specific aspect of instrumentation such as computer control, analysis instrumentation or electronic instrumentation.

COURSES:

SEMESTER 1	15 WEEKS
ELTC140	Introduction to Electronics
ELTC141	Electrical Fundamentals Advanced
ELTC142	Network, Motor and Generators
ELTC146	Electronic Laboratory
ENG142	English and Communications
MATH151	Mathematics

SEMESTER 2	15 WEEKS
ELTC231	Semiconductor Devices
ELTC148	Semiconductor Principles and Circuits
ELTC149	Advanced Transistors
ELTC151	Electronic Laboratory
ENG143	English and Communications
MATH152	Mathematics

SEMESTER 3	15 WEEKS
ELTC150	Logic Systems
ELTC230	Waveshaping and Control Devices
ELTC232	AM/FM Technology
ELTC233	Electronic Laboratory
MATH251	Mathematics
ENG242	Language and Communications

SEMESTER 4	15 WEEKS
INST104T	Measuring Principles II
INST105T	Measuring Principles I
INST210T	Automatic Control Principles I
INST221B	Laboratory—Instrumentation
PHY201T	Physics
CHEM100	Applied Chemistry
ENG243	English and Communications

SEMESTER 5	15 WEEKS
INST310T	Automatic Control Principles II
ELTC235	Computer Technology
INST201T	Final Control Elements
INST309A	Laboratory—Instrumentation
MATH351	Mathematics
CHEM200	Industrial Chemistry and Equipment
ENG300	Report Writing
ELTC221B	Laboratory-Electronics

SEMESTER 6	15 WEEKS
INST202T	Analytical and Environmental Instrumentation
INST302	Systems Design and Construction
ELTC303	Automatic Controls Systems
INST309B	Laboratory—Instrumentation
ELTC309B	Laboratory—Electronics
PHY202T	Modern Physics
INST399	Technology Report

Instrumentation Mechanic

GBC Code EN542 **Starting:** Continuously
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITE: Grade 10 or equivalent.

ABOUT THE PROGRAM: This program is designed to provide students with the fundamentals of industrial instrumentation. The graduate will have a fundamental knowledge of the installation and maintenance of pneumatic and electronic measuring and control devices.

CAREER PROSPECTS: The graduate from this program can find employment in a wide variety of industries such as: pulp and paper mills; oil refineries; steel mills; mining operations; public utilities and instrument manufacturers.

COURSES:

SEMESTER 1	20 WEEKS
ELTC530	Electrical and Electronics Fundamentals
ELTC531	Semi-Conductors Devices and Circuits
ELTC533	Electronic Fundamentals Laboratory
ELTC540	Passive Circuit Analysis
ENG503	Business Practices and Communications (Part A)

SEMESTER 2	20 WEEKS
INST546	Measurement Principles
INST537	Pneumatic Theory and Instruments
INST539	Control Theory and Systems
ELTC542B	Basic Construction Techniques
ENG504	Business Practices and Communications (Part B)
ENDR511	Basic Mechanical Drawing

Instrumentation Mechanic–EST Modular

GBC Code EN587 **Starting:** Continuously
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Sponsorship of Employer.

ABOUT THE PROGRAM: The program is offered on a day-release basis to employer-sponsored students and progresses as a self-paced, independent-learning curriculum. The theory in the program is developed so that the principles involved in various circuits, modules and systems can be applied to all types of instrumentation equipment. To compliment the theory, practical sessions in the laboratory are given on the relevant equipment and instruments.

CAREER PROSPECTS: The aim of the program is to provide a technically competent individual who has a broad foundation and understanding of Industrial Instrumentation and its applications to industry. Graduates will be trained in the installation and maintenance of pneumatic and electronics measuring and control devices.

COURSES:

SEMESTER 1	40 WEEKS
ELTC530	Electrical and Electronics Fundamentals
ELTC531	Semi-Conductors Devices and Circuits
ELTC533	Electronic Fundamentals Laboratory
ELTC540	Passive Circuit Analysis
ELTC542A	Basic Construction Techniques and Mechanics
ENG503	Business Practices and Communications (Part A)

SEMESTER 2	40 WEEKS
INST546	Measurement Principles
INST537	Pneumatic Theory and Instruments
INST539	Control Theory and Systems
ELTC542B	Basic Construction Techniques
ENG504	Business Practices and Communications (Part B)
ENDR511	Basic Mechanical Drawing

Electro-Mechanical Technician–Drafting

GBC Code EL204 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters (64 Weeks)

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics in years 3 and 4 at or above the general level.

BACKGROUND: Credits in physics, electricity and drafting would be helpful.

ABOUT THE PROGRAM: Subjects covered include theory of electrical/electronic fundamentals including AC and DC machines. Theory fundamentals in plumbing—heating ventilation and air condition designs and installations. Drafting subjects include architectural drafting and blueprint reading, electrical and mechanical layout drawings and drafting procedures. Introduction to and applications of a computer aided drafting and design (CADD) system. General subjects include English and mathematics.

CAREER PROSPECTS: Graduates could find employment in: the design office of consulting engineers or architects, in the production of mechanical or electrical layouts for residential, commercial and industrial buildings; in public utilities in the production of electrical or mechanical distribution systems; and in construction to modify existing drawings as required.

COURSES:

SEMESTER 1	16 WEEKS
ELTC154	Electrical Fundamentals
ENDR160	Descriptive Geometry
ARDR155	Architectural Drafting and Methods of Construction I
ARDR156	Mechanical Installation Drafting I
EL165	Computer Programming
ENG141	Language and Communications I
MATH160	Mathematics
ELDR127	Electrical Drafting I

SEMESTER 2	16 WEEKS
ELTC155	Electrical Circuits and Equipment
ARDR166	Mechanical Installation Drafting II
HT115	Heating Systems
ARDR165	Architectural Drafting and Methods of Construction II
ELDR137	Electrical Drafting II
ENG182	Language and Communications II
MATH161	Mathematics
MECH128	Mechanics

SEMESTER 3	16 WEEKS
AIR212	Air-Conditioning Systems
PLUM200	Plumbing and Sprinkler Systems
ARDR233	Advanced Drafting Techniques and Systems
EL275	Wiring Method and Electrical Code
ELDR249	Electrical Drafting III and Distribution Systems
ENG263	Language and Communications
MATH260	Mathematics
MACH207	Introduction to Computer Aided Drafting Design

SEMESTER 4	16 WEEKS
AIR213	Air-Conditioning Systems Applications
PLUM201	Plumbing and Sprinkling Systems Applications
HT206	Heating Systems Applications
ELTC247	Electrical Systems Applications
MACH208	Computer Aided Drafting and Design Applications
EL276	Auxiliary Systems Design and Applications
MATH261	Mathematics
ENG264	Language and Communications

Mechanical Engineering Technician–Drafting Design (CAD/CAM)

GBC Code EN115 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grade 12 mathematics and English at or above the general level, or mature student status. All applicants are interviewed before acceptance.

ABOUT THE PROGRAM: Industrial modernization and the streamlining of engineering and production methods are causing a rapid upgrading of manpower requirements. New skills and challenges are required by all levels of employees in order to survive in a computer-orientated manufacturing environment.

To meet this need, the College with the aid of a local Advisory Committee has developed a High Tech program titled "MECHANICAL ENGINEERING TECHNICIAN—DRAFTING DESIGN". This program with the emphasis on CAD/CAM is designed to meet the new challenge and provide industry with skilled personnel. Graduates of this program may expect to be integrated into the engineering field with a minimum amount of in-plant training.

CAREER PROSPECTS: The Mechanical Engineering Drafting Design program is a new high tech level of training that emphasizes the skills required to become proficient in the fields of computer aided design and manufacturing. Graduates can look forward to a career in the modern design and production environment in such areas as tool design, machine design and manufacturing processes.

COURSES:

SEMESTER 1	15 WEEKS
MACH127	Metalworking Concepts
NC208	Numerical Control
ENDR159	Drafting Concepts
MATH157	Analytical Geometry
MATH158	Mathematics
MATH159	Microcomputer Sciences
PM110	Precision Measurement
ENG141	Language and Communications
MECH127	Mechanics

SEMESTER 2	19 WEEKS
MACH127	Metalworking Concepts
NC208	Numerical Control
ENDR159	Drafting Concepts
MATH157	Analytical Geometry
MATH158	Mathematics
MATH159	Microcomputer Sciences
PM110	Precision Measurement
ENG172	Language and Communications II
MECH127	Mechanics

SEMESTER 3	15 WEEKS
MATH258	Mathematics
MET100	Metallurgy
ENDR243	Tool Design Concepts
MACH205	Computer Aided Design and Drafting
MACH206	Computer Aided Manufacturing
MATH259	Computer Programming/ Systems
ED100	Fundamentals of Supervision

SEMESTER 4	19 WEEKS
TH258	Mathematics
MET100	Metallurgy
ENDR243	Tool Design Concepts
MACH205	Computer Aided Design and Drafting
MACH206	Computer Aided Manufacturing
MATH259	Computer Programming/ Systems
ED100	Fundamentals of Supervision

Mechanical Engineering Technician–Toolmaking

GBC Code EN104 **Starting:** September, January
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at, or above, the general level, or mature student status. Students with credits in machine shop will be given priority.

PROGRAM DESCRIPTION: Instruction combines theoretical and practical training in toolmaking and related subjects in well-equipped machine shops and laboratories.

CAREER PROSPECTS: Graduates of the two-year toolmaking technician program can look forward to a career in the modern production process, one that demands skill, application, accuracy and cost-consciousness.

COURSES:

SEMESTER 1	15 WEEKS
ENDR134	Tool Design (Jig and Fixtures)
MACH120	Toolmaking
NC126	Numerical Control
PM110	Precision Measurement
MATH100	Mathematics
MECH100	Mechanics
ENG141	Language and Communications I

SEMESTER 2	19 WEEKS
ENDR134	Tool Design (Jig and Fixtures)
MACH120	Toolmaking
NC126	Numerical Control
PM110	Precision Measurement
MATH100	Mathematics
MECH100	Mechanics
ENG172	Language and Communications II

SEMESTER 3	15 WEEKS
ENDR242	Die Design
MACH204	Diemaking
NC208	Numerical Control
MET100	Metallurgy
MATH200	Mathematics
MECH110	Mechanics of Materials
ED100	Fundamentals of Supervision

SEMESTER 4	19 WEEKS
ENDR242	Die Design
MACH204	Diemaking
NC208	Numerical Control
MET100	Metallurgy
MATH200	Mathematics
MECH110	Mechanics of Materials
ED100	Fundamentals of Supervision

Machine Shop

GBC Code EN544 **Starting:** Continuously
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Grade 10 or equivalent.

ABOUT THE PROGRAM: This program is designed to prepare students for entry into industry as machinists, apprentices, or machine operators. The category in which a student finds employment depends upon his/her age, previous experience, and the levels of skill and knowledge he/she has acquired. Students find it advantageous to have completed Grade 12 machine shop but, with suitable aptitudes and a willingness to work hard, those who have completed Grade 10 may prove successful in the program and later become good machinists.

Instruction is particularly concerned with measurement and machining to close tolerances, combined with production speeds and efficiencies of manufacture, sharpening cutting tools, and setting up machines.

CAREER PROSPECTS: Graduates can look forward to careers as Machinists, Tool & Die Makers, Mouldmakers, Numerical Control Operators and Industrial salespeople.

COURSES:

SEMESTER 1	20 WEEKS
MACH540	Benchwork
MACH541	Lathework
ENDR574	Blueprint Reading
MATH536	Shop Calculations
ENG530	Industrial Communications
WELD545	Welding

SEMESTER 2	20 WEEKS
ENDR574	Blueprint Reading
MACH542	Milling and Shaping
MACH543	Grinding
MACH545	Numerical Control
MATH536	Shop Calculations
MET532	Metallurgy

Industrial Electronic Controls

GBC Code EL574 **Starting:** September, October, December, February and April
Casa Loma Campus **Certification:** Certificate
8 Weeks

PREREQUISITES: BTSD111 or equivalent.

ABOUT THE PROGRAM: This program is designed to provide graduates with the fundamental principles of electronics, and a solid base in industrial electronics so that after an initial familiarization in his/her employer's field he/she can function as a competent electronics technician.

CAREER PROSPECTS: Graduates may be employed as maintenance journeymen electricians by electrical contractors or in maintenance departments of industrial firms.

COURSES:

	8 WEEKS
ELT540	Industrial Electronics—Theory
WELD609	Welding
ELT541	Electronics Shop

Industrial Electronic Controls—Journeyman

GBC Code EL575 **Starting:** September and January
Casa Loma Campus **Certification:** Certificate
13 Weeks

PREREQUISITES: Unemployed journeyman electrician, must be interviewed and/or pass entrance test.

ABOUT THE PROGRAM: This program provides certified unemployed journeyman electricians with additional electronic skills, in order to make them more employable. Many jobs exist in industry for electricians who can service industrial electronic equipment but very few have the necessary skills.

The candidate must be unemployed and possess a Certificate of Qualification in the trade of electrical construction and maintenance (electrician) issued by the Ministry of Colleges and Universities, Industrial Training Branch. All candidates must be interviewed and pass an entrance test.

CAREER PROSPECTS: Graduates may be employed as journeymen electricians by electrical contractors or in the maintenance departments of industrial concerns, troubleshooting and maintaining electronically controlled machines including numerical or computer controlled equipment, as well as programmable control systems.

COURSES:

	13 WEEKS
ELTC542	Industrial Electronic Controls—Theory
ELTC543	Industrial Electronic Controls—Practice

Energy Conversion Technology—Solar-Biomass

GBC Code MS100 **Starting:** September
Casa Loma Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grade 11 physics, Grade 12 mathematics and English at, or above, the general level.

RECOMMENDATION: Credits in chemistry, drafting, electricity, electronics, computer programming and calculus.

ABOUT THE PROGRAM: This three-year program is designed to provide skilled technicians and technologists for the energy technology field, especially in the areas of energy conversion and alternative energy.

Ontario is committed to increasing its energy self-sufficiency from 22 to 35 per cent by 1995, with a minimum of five per cent of the province's energy needs (or 40 per cent of the increase) being met through a renewable energy contribution from solar energy and biomass, as stated in "Energy Security for the Eighties: A Policy for Ontario", released September 1979 by the Minister of Energy.

In the third and final year of the program, students will specialize in one of the following options: solar energy (the conversion and utilization of many forms of energy originating from the sun) or biomass (the conversion of organic material and municipal waste to useable forms of energy).

CAREER PROSPECTS: Graduates of this program are qualified for jobs in such diverse fields as photovoltaic solar cell manufacture, biomass conversion, waste disposal, wood gas production and energy storage. Graduates will be employed as technologists, technicians, researchers, designers, systems co-ordinators, salespeople and technical writers.

For more information about this program, please call the Math and Science Division, 967-1212.

OPTIONS: Radiant Solar Energy, Biomass Energy

COURSES:

SEMESTER 1	15 WEEKS
ECT110	Alternative Energy Systems
ECT115	Energy Concepts
MACH107	Machine Shop Processes
MECH103	Mechanics and Mechanisms
PHY124	Physics
MATH117	Mathematics
ENG141	Language and Communications 1
ELS154	Man—Environment Impact
WELD148	Welding Processes and Application

SEMESTER 2	19 WEEKS
ECT120	Solar Energy—Conversion Systems
ECT125	Energy Conservation
ELTC131	Electronic Circuits
GEO120	Climatology and Meteorology
CHEM117	Chemistry
MATH126	Mathematics II
ENG182	Language and Communications II
ELS155	Energy Law

Option 1—Radiant Solar Energy

SEMESTER 3	15 WEEKS
PHY233	Thermodynamics and Heat Transfer
ELTC246	Electronics II
MECH204	Mechanics of Materials
CHEM252	Physical Chemistry
MATH254	Mathematics
PRGM236	Computer Languages
ELECT000	Elective
Choose 1 of the following 2 electives	
AIR204	Heating and Refrigeration
ECT200	Photovoltaic Semiconductor cells

SEMESTER 4	19 WEEKS
ECT202	Solar Heating/Solar Option
ECT203	Energy Economics
ECT204	Wind and Water Systems
MATH256	Computers and Microprocessors
MECH205	Fluid Mechanics
INST222	Instrumentation
MATH257	Mathematics

SEMESTER 5	15 WEEKS
ECT300S	ECT Option Theory—Radiant Solar Energy
ECT301S	ECT Option Lab Report—Radiant Solar Energy
ELTC317	Electronic Control Systems
ENDR345	Drafting and Design
PHY300	Modern Physics and Technology
MATH354	Mathematics
ELS301	Supervision

SEMESTER 6	19 WEEKS
ECT302S	ECT Option Theory—Radiant Solar Energy
ECT303S	ECT Option Lab Report—Radiant Solar Energy
ECT304	ECT Second Lab Report
ECT305	Direct Energy Conversion
MATH355	Mathematics
ELS302	Report Writing

Option 2—Biomass Energy

SEMESTER 4	19 WEEKS
ECT201	Biomass/Biomass Option
ECT203	Energy Economics
ECT204	Wind and Water Systems
MATH256	Computers and Microprocessors
MECH205	Fluid Mechanics
INST222	Instrumentation
MATH257	Mathematics

SEMESTER 5	15 WEEKS
ECT300B	ECT Option Theory—Biomass Energy
ECT301B	ECT Option Lab Report—Biomass Energy
ELTC317	Electronic Control Systems
ENDR345	Drafting and Design
PHY300	Modern Physics and Technology
MATH354	Mathematics
ELS301	Supervision

SEMESTER 6	19 WEEKS
ECT302B	ECT Option Theory—Biomass Energy
ECT303B	ECT Option Lab Report—Biomass Energy
ECT304	ECT Second Lab Report
ECT305	Direct Energy Conversion
MATH355	Mathematics
ELS302	Report Writing

Welding Specialist

GBC Code EN153 **Starting:** September
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, including Grade 12 mathematics and English, or equivalent, with one of the following: (A) specialization in welding in a secondary school, (B) successful completion of a Welding-Fitter program in a College of Applied Arts and Technology, (C) approved industrial experience.

Note: Pre-entry training or upgrading can be arranged for candidates who do not possess the stated prerequisite. A pre-entry assessment test can be arranged to verify previous practical experience.

ABOUT THE PROGRAM: This program combines practical instruction in well-equipped shops and laboratories with complementary coverage of theory and related areas required for a wide range of welding-related occupations. Emphasis is placed on the selection, operation, troubleshooting and industrial application of manual, semi-automatic and fully automatic welding equipment. A successful graduate has a sound background in weld inspection, quality control, production procedures and metallurgical principles along with a variety of manipulative welding skills.

CAREER PROSPECTS: Graduates can expect to find employment in a wide variety of companies involved in metal fabrication, in positions which involve the set up and monitoring of sophisticated welding systems, development of welding procedures, welding inspection and quality control. Opportunities exist in sales and technical service for manufacturers or distributors of welding equipment.

COURSES:

SEMESTER 1	20 WEEKS
WELD100	Shielded Metal Arc and Oxy-Acetylene Welding
WELD101	Gas Tungsten Arc Welding
WELD102	Gas Metal Arc, Fluxed Cored and Submerged Arc
WELD103	Shop and Laboratory Procedures
MET110	Metallurgy
MATH130	Mathematics
ENG141	Language and Communications I
EL200	Electric Fundamentals
ENDR119	Technical Drawing
ENDR128	Descriptive Geometry

SEMESTER 2	20 WEEKS
WELD100	Shielded Metal Arc and Oxy-Acetylene Welding
WELD101	Gas Tungsten Arc Welding
WELD102	Gas Metal Arc, Fluxed Cored and Submerged Arc
WELD103	Shop and Laboratory Procedures
MET110	Metallurgy
MATH130	Mathematics
ENG182	Language and Communications II
EL200	Electric Fundamentals
ENDR128	Descriptive Geometry
ENDR119	Technical Drawing

Fitter Welder

GBC Code EN586 **Starting:** September and January
Casa Loma Campus **Certification:** Certificate
2 Sessions

PREREQUISITES: Grade 10 or equivalent or functional level test administered by the College.

ABOUT THE PROGRAM: This program provides instruction in the practical and theoretical aspects of layout and fitting of structural sections, pipe, plate, and sheet, working from blueprints. Students will learn the set-up and operation of power-operated metal fabrication equipment such as shears, rolls, press brakes, iron workers, bandsaws, grinders and drill presses. Instruction in shielded metal arc welding, and oxy-acetylene welding and cutting also forms an important part of the training.

CAREER PROSPECTS: Graduates can expect to find employment in the metal fabrication industry as Fitter-Welders whose duties include fitting and/or welding.

COURSES:

SEMESTER 1	20 WEEKS
Basic	
FW510	Fitter-Welder Theory
FW511	Fitter-Welder Practice
WELD518	Welding

SEMESTER 2	20 WEEKS
Advanced	
FW530	Fitter-Welder Theory
FW531	Fitter-Welder Practice
WELD538	Welding

WELDING OPERATOR

GBC Code EN552 **Starting:** TBA
Casa Loma Campus **Certification:** Certificate
20 weeks

PREREQUISITES: Grade 8 or equivalent or functional level test administered by the College.

ABOUT THE PROGRAM: This program provides an excellent opportunity for anyone to learn a useful skill in a relatively short period of time. A concentrated practical program covering shielded metal arc (SMAW), oxy-acetylene welding and cutting, and the fundamentals of gas metal arc welding (GMAW), is designed to develop the necessary manipulative skills required by industry. The appropriate theory related to each welding process together with a sound introduction to blueprint reading complements the practical work.

Evening courses in more advanced welding techniques are readily available for the ambitious person wishing to prepare for advancement.

CAREER PROSPECTS: Graduates may expect to find employment in a wide variety of metal fabrication shops as a welder.

COURSES:

	20 WEEKS
WELD520	Welding Theory
WELD530	Oxy-Acetylene Welding/ Brazing/Cutting
WELD531	Shielded Metal Arc Welding
WELD534	Gas Metal Arc Welding
ENDR573	Blueprint Reading
ENG541	Industrial Communications

Welding Fitter

GBC Code EN551 **Starting:** September
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Grade 10 or equivalent, or functional level test administered by the College.

ABOUT THE PROGRAM: This program provides sound practical instruction, together with appropriate theory, in all of the major welding processes currently in use in industry. Graduates will be able to meet recognized industrial standards of competence in the use of the shielded metal arc (SMAW), gas metal arc (GMAW) flux-cored arc (FCAW), gas tungsten arc (GTAW) and oxy-acetylene welding and cutting processes. Graduates will be eligible to take a practical all-position SMAW test to qualify for MCCR certification for pressure welding. Graduates will also have a sound knowledge of the fundamentals of fabrication procedures and the interpretation of shop drawings.

Students graduating from this program will be considered for the Welding Specialist program which is designed to prepare graduates to advance toward positions in the welding industry at the technician level.

CAREER PROSPECTS: The steel fabricating industry is extremely diversified, producing a wide range of products. Consumer goods, automobiles, structural steel components for buildings and bridges, pressure vessels, and industrial and transmission piping installations are all examples of products requiring skilled welders. A graduate from the Welding Fitter program possesses the skills to enter any of these interesting fields, and advance toward positions of responsibility in the welding industry.

COURSES:

SEMESTER 1	20 WEEKS
WELD550	Welding Theory
WELD540	Oxy-Acetylene Welding/ Brazing/Cutting
WELD541	Shielded Metal Arc Welding
WELD542	Fabrication
ENDR575	Drawing Layout and Calculation
ENG530	Industrial Communications

SEMESTER 2	20 WEEKS
WELD550	Welding Theory
WELD540	Oxy-Acetylene Welding/ Brazing/Cutting
WELD541	Shielded Metal Arc Welding
WELD542	Fabrication
WELD543	Gas Tungsten Arc Welding
WELD544	Gas Metal Arc Welding
ENDR575	Drawing Layout and Calculation

WELDING FITTER REFRESHER

GBC Code EN554 **Starting:** TBA
Casa Loma Campus **Certification:** Certificate
20 Weeks

PREREQUISITES: Grade 10 or equivalent or functional level test administered by the College. Manipulative skills necessary for reasonably good quality workmanship in the flat and horizontal positions, using shielded metal arc welding and oxy-acetylene welding processes; a pre-induction theory and practical test is required.

ABOUT THE PROGRAM: The program is designed to build upon and improve previously acquired welding skills. The program provides instruction in shielded metal arc, gas metal arc, gas tungsten arc, and oxy-acetylene welding and cutting. Graduates will be eligible to take a practical all-position SMAW test to qualify for MCCR certification for pressure welding. Graduates will understand the basic concepts of fabrication procedures and interpretation of blueprints.

CAREER PROSPECTS: Graduates may expect to find employment at the mechanic's level in any one of a wide variety of industrial welding positions or related occupations.

COURSES:

20 WEEKS	
WELD520	Welding Theory
WELD535	Oxy-Acetylene Welding/ Brazing/Cutting
WELD531	Shielded Metal Arc Welding
WELD532	Fabrication
WELD533	Gas Tungsten Arc Welding
WELD534	Gas Metal Arc Welding
ENDR573	Blueprint Reading

FASHION

CREATIVE FASHION DESIGN

GBC Code FT101 **Starting:** September
Kensington Campus **Certification:** Diploma
6 Semesters
Optional third year (2 semesters): Creative Fashions—Design-A-Line

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, or equivalent. Qualified applicants will complete a questionnaire and will attend an orientation session at the College prior to acceptance to the program.

BACKGROUND: Credits in art, home economics, mathematics and social sciences are desirable.

ABOUT THE PROGRAM: The Canadian apparel industry employs well over 100,000 people. It is a labour intensive industry which depends upon the skills of its employees for much of its viability and effectiveness.

The Creative Fashion Design Program is intended to provide a thorough grounding in the apparel industry, with special emphasis upon design creation and execution. The course of studies is oriented well beyond the creative endeavours of developing a more pleasing or flattering or contemporary style, but rather, it is directed at providing all of the additional skills necessary to move the design from conception to the consumer.

Starting with an emphasis on the basic skills of sewing and garment assembly, it concentrates initially upon fundamentals of pattern making, pattern grading and garment construction. At the same time, students learn cutting and spreading techniques, evaluation of equipment used in production and textile and quality control in a factory and testing laboratory setting. Fashion illustration is taught in preparation for design creation, and for the ultimate fashion show in which creativity and effectiveness will be judged and graded.

Accompanying these initial endeavours are business studies beginning with business principles, economics, industrial psychology and proceeding through apparel merchandising and promotion; retailing distribution and marketing as well as costing techniques. At all times, students are engaged in copying, creating and executing designs of garments of various types from underwear to outerwear and swimwear for women, men, and children. The finished garments are modelled by students at both formal and informal fashion shows viewed by members of the apparel industry.

A diploma is issued at the end of the second year. An optional third year (Creative Fashions—Design-A-Line) is offered.

CAREER PROSPECTS: This concentrated course of studies is an ideal preparation for entry into or advancement in the needle trades or allied industries in a fascinating and rewarding manner. Past graduates have attained careers in manufacturing, wholesaling, retailing and service industries as well as in individual entrepreneur endeavours.

Following is a list of some of the job opportunities awaiting graduates: pattern makers; designers; display; fashion illustrator; fashion promotion; stylist; store manager; merchandise assistant; assistant buyer; salesperson (agent).

COURSES:

SEMESTER 1	15 WEEKS
SEW141	Sewing Laboratory
PAT141	Apparel Pattern Drafting I
BUS117	Business Principles Part I
ENG131	Technical Report Writing I
FAB100	Fabrics I
AUD102	Fashion Shows & Preparation
AT141	Apparel Technology Part I
FASH142	Fashion—Evolution and Development
FASH107	Fashion Illustration I
EC102	Microeconomics

SEMESTER 3	15 WEEKS
PAT201	Apparel Pattern Drafting IIIA
AT243	Apparel Technology IIIA
PAT202	Apparel Pattern Drafting IIIB
AT246	Apparel Technology IIIC
PSY207	Industrial Psychology
AM201	Apparel Retailing and Distribution
ELECT000	Elective
Choose 1 of the following 3 electives	
FASH200	Machine Knitting II—Elective
FUR205	Fur and Leather Technology—Elective
AUD201	Men's Wear Pattern Drafting II

SEMESTER 5	15 WEEKS
Option—Creative Fashions—Design-A-Line	
PAT341	Apparel Pattern Drafting VII
DES300	Design-A-Line
RSCH300	Research & Survey—Course Projects
AUD300	Audit Relevant Courses—Course Projects

SEMESTER 2	17 WEEKS
SEW156	Sewing Laboratory—Advanced
AT157	Apparel Merchandising and Promotion
PAT151	Apparel Pattern Drafting II
AT150	Apparel Technology Part II
ENG181	Technical Report Writing II
PAT158	Grading and Cutting
FASH157	Fashion Illustration II
AUD151	Men's Wear Pattern Drafting I
ELECT000	Elective
Choose 1 of the following 3 electives	
FUR155	Fur and Leather Design—Elective
FASH153	Machine Knitting I—Elective
FAB160	Fabrics Analysis and Laboratory

SEMESTER 4	17 WEEKS
PAT261	Apparel Pattern Drafting IV
AT263	Apparel Technology IVA
AT251	Garment Costing and Analysis (AT203)
PAT281	Patterns, Marking, Cutting Lab
AT264	Apparel Technology IVB
AT265	Apparel Technology IVC
RSCH253	Apparel Marketing (AT221)
ELECT000	Elective
Choose 1 of the following 3 electives	
FUR257	Fur and Leather Technology—Elective
FASH250	Machine Knitting III—Elective
AUD252	Men's Wear Pattern Drafting III

SEMESTER 6	17 WEEKS
DES351	Design-A-Line
RSCH351	Research & Survey—Course Projects
AUD351	Audit Relevant Courses—Course Projects

APPAREL MANUFACTURING MANAGEMENT

GBC Code FT103
Kensington Campus
6 Semesters

Starting: September optional third year (2 semesters)
Certification: Diploma

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, or equivalent. Qualified applicants will complete a questionnaire and will attend an orientation session at the College prior to acceptance to the program.

BACKGROUND: Credits in mathematics and social sciences are desirable.

ABOUT THE PROGRAM: The labour intensive apparel industry is the second largest employer in Canada.

Its diverse products range from delicate hosiery and underwear to heavy outerwear and safety equipment. A knowledge of materials and their effective use in industry is required.

The Apparel Manufacturing Management Program is designed to provide students with many of the basic skills necessary to enter this exciting field in a meaningful, practical, and rewarding way. Many of the 400 needle trade manufacturers in Ontario, as well as many of its retailers and wholesalers, have welcomed graduates of this program because of its thoroughness.

Starting with a hands-on course in actual sewing, the curriculum includes fabric analysis, sewing machine technology and pattern making, cutting and design to provide the student with first hand knowledge of operations performed in an apparel manufacturing organization.

There is an in-depth concentration on computer applications, system analysis, costing and time studies as well as plant layout and production techniques.

Management studies in this program include economics, merchandising, marketing, industrial psychology, personnel management, managerial organization and other disciplines necessary to operate effectively in the contemporary industrial environment.

In order to provide greater depth to the understanding of the goal of the organization, students operate their own retail store in the Kensington Campus. Starting with a small fund, they make and/or buy merchandise for resale to other students.

In this part of the curriculum, students are responsible for promotion, purchasing, display, sales, accounting procedures and are graded on their effectiveness in operating profitably, in a team effort.

In addition to the various courses of study, each student spends 10 weeks each year working in the industry as practical work experience. Placement may be in manufacturing, distribution services, etc., to provide appropriate supplementary training.

CAREER PROSPECTS: Graduates of the Apparel Manufacturing Management program are prepared for many of the following types of positions depending upon their aptitudes, desires and abilities: production supervisor; production scheduler; production assistant; time study engineer; quality control manager; training supervisor; costing analyst; assistant merchandise manager; merchandise manager; personnel director; foreperson; assistant foreperson; computer assistant; purchasing agent; warehouse manager; retail store manager; retail store buyer; merchandise clerk; marketing director; systems analyst; consultant.

COURSES:

SEMESTER 1	15 WEEKS
ATI10	Personnel Selection and Training
ATI00	Work Measurement Technology I
BUSI17	Business Principles Part I
ENGI18	Technical Report Writing
PRGMI25	Microcomputer Introductory
MATHI54	Computer Assisted Mathematics
PATI56	Pattern Drafting I
ECI02	Microeconomics
SEWI41	Sewing Laboratory
FABI00	Fabrics I
ACC113	Accounting—Methods and Techniques
ATI05	Apparel Machinery and Equipment

SEMESTER 2	27 WEEKS
AT157	Apparel Merchandising and Promotion
FABI60	Fabrics Analysis and Laboratory
AT151	Work Measurement Technology II
AT152	Patterns, Marking, Cutting Lab
PATI59	Patterns Drafting II
BUS159	Business Laboratory I
PSY207	Industrial Psychology
ACC151	Accounting—Financial Management
PRGMI35	Microcomputer Programming
EC172	Macroeconomics
AT192	Apparel Business (Practical)
PWE163	Practical Work Experience

SEMESTER 3	15 WEEKS
AT200	Quality Control
AM201	Apparel Retailing and Distribution
ENGI71	Management of Human Resources I
ACC216	Advanced Accounting
AT221	Apparel Marketing
PRGM225	Microcomputer Applications I
EC241	International Apparel Trade and Economics
ENG260	Socio-Political Industrial Environment
FAB200	Textile and Fabric Manufacturing
AT203	Garment Costing and Analysis I
BUS200	Business Laboratory II
PROD200	Production Scheduling
PROD201	Production Systems

SEMESTER 4	27 WEEKS
AT250	Garment Costing and Analysis
AT256	Apparel Plant Layout and Design
ACC262	Advanced Accounting—Budgeting and Forecasting
AT261	Apparel Marketing—Advanced
PRGM235	Microcomputer Applications II
AT281	Labour-Management Relations
ENG206	Management of Human Resources II
AT260	Textile Testing and Evaluation
AT271	Managerial Organization
AT262	Production Management
AUD251	Audit—Special Projects
RSCH251	Research
PWE263	Practical Work Experience

SEMESTER 5	15 WEEKS
The two-year graduate may apply for entry into the junior year of the apparel degree program at the Philadelphia College of Textiles and Sciences.	
AT350	Automated Machinery
AT320	Large Plant Problems
AT370	Multi-Plant Problems
FAB361	Fabrics Testing Lab
AT373	Delivery Schedules
EDP360	Advanced Computer Uses
AUD300	Audit Relevant Courses—Course Projects
RSCH300	Research and Survey—Course Projects

SEMESTER 6	17 WEEKS
AT350	Automated Machinery
AT320	Large Plant Problems
AT370	Multi-Plant Problems
FAB361	Fabrics Testing Lab
AT373	Delivery Schedules
EDP360	Advanced Computer Uses
AUD351	Audit Relevant Courses—Course Projects
RSCH351	Research and Survey—Course Projects

FUR, LEATHER AND SUEDE

GBC Code FT543 **Starting:** Continuously
Kensington Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Evidence of manual dexterity and good English comprehension.

ABOUT THE PROGRAM: The fur, leather and suede industries in Canada spring from the great tradition of our early settlers in hunting, trapping and trading.

Canada is looked upon as the original quality leader in the preparation and use of animal fur and hide products for both industrial and consumer use.

This is especially true because of the relatively small size of most of the companies, which precludes extensive in-house training programs.

George Brown College has been the North American leader in offering courses of study and industrial training in these areas.

In addition, the College maintains close liaison with companies and events in the trade, and assists students in obtaining both co-operative in-plant training positions, as well as permanent positions upon graduation.

CAREER PROSPECTS: Careers in the following areas may await the successful graduate:

In manufacturing—designers; fur operators; blockers; cutters; finishers; work room managers; pattern graders; fitters; leather workers.

In wholesaling and retailing—sales; merchandising; storage; shipping; buying; stock control; repairs; alterations; cleaning.

As an entrepreneur— furrier; retailer; manufacturer; wholesaler.

OPTIONS: 1 - Blocking and Squaring, 2 - Fur Finishing, 3 - Fur Operating, 4 - Leather, 5 - Fur and Leather Design, 6 - Sales, Service and Repairs.

COURSES:

SEMESTER 1 10 WEEKS

A management-labour-College team will evalute each student at the end of his/her eighth week and, with the students consent, stream him/her into one of the following six optional semesters.

FUR543A	Fur Recognition I
FUR544A	Fur Manufacturing Techniques I
FUR545A	Fur and Leather Design
LTH543A	(Introduction) Leather and Suede Recognition
LTH544A	Leather Manufacturing Techniques
ENG571	Fashion Communications
FASH510	Fashion Business Routines 1A
AUD500	Audit Relevant Courses—Course Projects
RSCH500	Research and Survey—Course Projects
MATH507	Business Arithmetic

SEMESTER 2 10 WEEKS

Option 1: Blocking and Squaring

FUR524	Fur Blocking and Squaring
ENG581	Fashion Communications
FASH551	Fashion Business Procedures
AUD551	Audit Relevant Courses—Course Projects
RSCH551	Research and Survey Course Projects
MATH507	Business Arithmetic

SEMESTER 2 10 WEEKS

Option 2: Fur Finishing

FUR534	Fur Finishing
ENG581	Fashion Communications
FASH551	Fashion Business Procedures
AUD551	Audit Relevent Courses—Course Projects
RSCH551	Research and Survey Course Projects
MATH507	Business Arithmetic

SEMESTER 2 20 WEEKS

Option 4: Leather

LTH544B	Leather Manufacturing Techniques
LTH554	Leather Manufacturing Techniques
ENG581	Fashion Communications
FASH551	Fashion Business Procedures
AUD551	Audit Relevent Courses—Course Projects
RSCH551	Research and Survey Course Projects
MATH507	Business Arithmetic

SEMESTER 2 30 WEEKS

Option 6: Sales, Service and Repairs

FUR543	Fur Recognition
FUR553	Fur Look-A-Likes
FUR544B	Fur Manufacturing Techniques II
FUR554	Fur Manufacturing Techniques
FUR545B	Fur and Leather Fashions I
FUR555	Fur and Leather Fashions
FUR543B	Fur Recognition II
FUR543	Fur Recognition
FUR544B	Fur Manufacturing Techniques II
LTH554	Leather Manufacturing Techniques
ENG581	Fashion Communications
FASH551	Fashion Business Procedures
AUD551	Audit Relevant Courses—Course Projects
RSCH551	Research and Survey Course Projects
MATH507	Business Arithmetic

SEMESTER 2 15 WEEKS

Option 3: Fur Operating

FUR564	Fur Operating
ENG581	Fashion Communications
FASH551B	Fashion Business Routines
AUD551	Audit Relevent Courses—Course Projects
RSCH551	Research and Survey Course Projects
MATH507	Business Arithmetic

SEMESTER 2 30 WEEKS

Option 5: Fur and Leather Design

FUR545B	Fur and Leather Fashions I
FUR555	Fur and Leather Fashions
ENG551	Fashion Communications I
FASH551	Fashion Business Procedures
AUD551	Audit Relevant Courses—Course Projects
RSCH551	Research and Survey Course Projects
MATH507	Business Arithmetic

Apparel Pattern Drafting

GBC Code FT540 **Starting:** September
Kensington Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: AS541—B.T.S.D. 2 or equivalent; interview and sewing experience are more important, eight week appraisal and evaluation; motivation.

ABOUT THE PROGRAM: The Apparel Pattern Drafting program at George Brown is oriented toward the preparation of patterns from which materials are cut preparatory to sewing into well fitting garments.

While the thrust of this program is directed at apparel design, it encompasses most of the disciplines necessary to a successful career in this area of the industry.

The student is expected to be able to operate all of the equipment usually used in constructing the finished garment. Therefore garments are assembled on industrial equipment. Modifications in the pattern are practised by the student when the intended fit is not realized in the finished garment.

The program includes a study of body types by size and proportion, both male and female, so that "grading" between sizes can be accomplished by the student to fit various body types and dimensions.

Instruction is provided not only in the characteristics of fabrics and thread used in construction, but also a review of spreading equipment and techniques for "laying-up" goods, and methods of computing waste factors.

Basic business skills such as effective communication and business arithmetic and related subjects are part of the curriculum.

CAREER PROSPECTS: The Canadian apparel industry, centred largely in Ontario, survives even in the face of fierce international competition, on the basis of ingenuity and flexibility in design and production.

The successful pattern drafting graduate is well prepared to enter the field in an area which is extremely receptive to saleable ideas in styling and production.

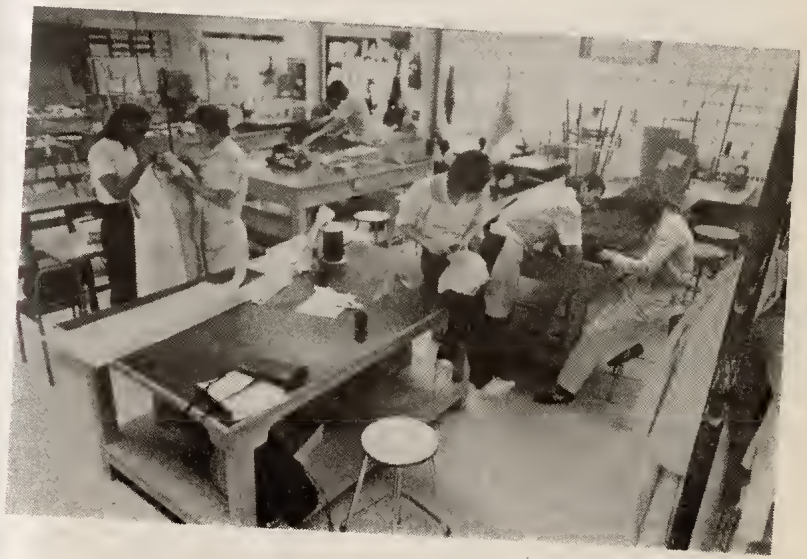
The small size of many of the organizations in the industry lends itself toward immediate and intimate involvement by the new employee, in many of the firm's activities.

The successful graduate may be prepared for careers in manufacturing, wholesale, retailing or in private practice in one or more of the following areas: pattern maker; pattern grader; stylist; assistant designer; yardage estimator; sample maker; pattern alterationist; alterationist or fitter; custom seamstress; workroom supervisor trainee; salesperson; garment inspector.

COURSES:

SEMESTER 1	16 WEEKS
PAT541	Apparel Pattern Drafting I
PAT542	Apparel Design I—Grading and Cutting
PAT544	Fashion Illustration I
DRES561	Elementary Dressmaking
SEW561	Sewing Machine Operation
AUD500	Audit Relevant Courses—Course Projects
RSCH500	Research and Survey—Course Projects
FAB551	Fabrics I

SEMESTER 2	16 WEEKS
PAT551	Apparel Pattern Drafting III
PAT552	Apparel Design II
PAT553	Apparel Pattern Drafting IV
PAT554	Fashion Illustration II
DRES571	Advanced Dressmaking
SEW571	Sewing Machine Operation II
ENG531	Fashion Communications II
AUD510	Audit Relevant Courses—Course Projects
RSCH510	Research and Survey—Course Projects
FAB561	Fabrics II



Industrial Power Sewing

GBC Code FT524 **Starting:** Continuously
Kensington Campus **Certification:** Certificate
8 Weeks

PREREQUISITES: Evidence of digital dexterity and some English comprehension.

ABOUT THE PROGRAM: The needle trades industry in Canada is one of the largest employers in the country.

The 400 companies in Ontario, which are engaged in apparel production, require a continuing supply of efficient sewing machine operators in order to compete effectively in this important sector of our economy.

Sewing machine operators are engaged in the construction of apparel for men, women and children; of upholstery and draperies; and for such diverse products as tents and awnings as well as for the most intimate items of apparel.

The program is designed to provide students with the skills necessary to operate the most commonly used sewing machines in the apparel and related industries.

As the student's skills are improved, advancement to more specialized equipment is possible.

Working in an environment of industrial equipment under the direction of industrial professionals, the student is soon working on real garments for consumers.

Starting with the basic tasks of familiarization with equipment and safety practices: selecting and threading needles; changing bobbins and lubricating the machine and controlling this instrument, the sewer is soon master of the mechanism.

Student performance is monitored carefully and continuously, stressing accuracy, efficiency of motion and speed.

This program is endorsed by the Apparel Manufacturers Association of Ontario.

CAREER PROSPECTS: Careers in the following area may be possible: in construction, assembly or alteration and repair establishments; garment factories; retail store work rooms; luggage producers; upholstery manufacturers; handbag companies; mattress and bedding makers; drapery and curtain producers; neckwear, novelty; furniture manufacturers; athletic wear producers and many others.

Entry level positions may be as a sewing machine operator either making parts and receiving further training; or on the assembly line, the sample line or even in repair of faulty garments or other items. Positions are also available as alterationist, fitter or repair operator in retail establishments which sell sewn items.

Promotion is possible to section hand, assistant foreperson, foreperson, supervisor, training operator and other more advanced positions depending upon your own skill improvements.

COURSES:

8 WEEKS

Single needle lockstitch sewing machine garment assembly

SEW541B	Sewing Machine Performance Objectives
ENG508	English
ELECT000	Elective

Choose 1 of the following 3 electives

SEW542	Serger Machine
SEW543	Blindstitch Machine
SEW544	Buttonhole—Button Sew

Industrial Power Sewing Machine Mechanic

GBC Code FT547 **Starting:** Continuously
Kensington Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Grade 10 or equivalent.

ABOUT THE PROGRAM: Industrial sewing machines are used in the production of virtually thousands of consumer and industrial goods and component parts.

The equipment used in these industries varies from simple stitching by one individual on one part to sophisticated computer assisted assembly techniques with multiple operations being performed by the touch of a button or switch.

This full-time program is designed to equip students with the skills necessary to repair, maintain, rebuild and service much of the equipment used in these industries.

Since effective use of such equipment usually involves an understanding of various production operations and techniques, many experienced mechanics are promotable to product management positions at even higher levels within the organization.

The course is both practical and theoretical. It encompasses such diverse and essential subjects as pneumatics and electronics, sewing threads and needle characteristics, machine speeds and performance characteristics.

When the student has progressed to a specified level, as part of the learning process, he/she will assist in the care, maintenance and instruction to others of the large variety of sewing equipment within the campus which is used in the Apparel, Upholstery, Fur, and Creative Fashion training areas. This will give the student some insight and practical experience in the types of situations he/she may eventually find upon graduating.

CAREER PROSPECTS: Careers in the following areas may await successful graduates:

In the apparel industry—sewing machine mechanic; maintenance engineer; methods engineer; sales engineer; machinery consultant; equipment specialist.

In other needle trades industries and as an entrepreneur:—machine mechanic; maintenance engineer; sewing systems analyst; independent repair specialist; dealer in specialty equipment.

COURSES:

SEMESTER 1 20 WEEKS

SMM500	Sewing Fundamentals
SMM504	Garment Structure
SMM501	Sewing Laboratory
SMM505	Fabric, Needles, Thread
SMM502	Drive Unit
SMM503	Basic Lockstitch I
ENG551	Fashion Communications I
MATH508	Mathematics
SC501	Basic Electricity
AUD500	Audit Relevant Courses—Course Projects
RSCH500	Research and Survey—Course Projects
ELT500	Workshop Practice 1
PWE500	Practical Work Experience

SEMESTER 2 20 WEEKS

SMM510	Basic Lockstitch II
SMM511	Basic Chainstitch
SMM512	Overedge Equipment
SMM513	Blindstitch Machines
SMM514	Bartack Machines
SMM515	Buttonhole Machine
ELT510	Workshop Practice II
SC510	Basic Electricity II
AUD510	Audit Relevant Courses—Course Projects
RSCH510	Research and Survey—Course Projects
MATH520	Mathematics

Furniture Production and Design

GBC Code FT104 **Starting:** September
Kensington Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, or equivalent.

Qualified applicants will complete a questionnaire and will attend an orientation session at the College prior to acceptance to the program.

BACKGROUND: Experience in drawing, woodworking, finishing or upholstery would be an asset.

ABOUT THE PROGRAM: The furniture industry in Canada numbers well over 700 production plants and 1,800 custom shops. Of that number, more than two-thirds are in Ontario.

The industry is engaged in the production and distribution of furniture for home use, and the construction and sale of fixtures, cabinets, racks and industrial equipment for use by manufacturers, retailers, schools, hospitals, and transportation groups.

The program concentrates on the three main skills in furniture manufacturing: cabinet-making, finishing and upholstering. In the first year, the student will study topics such as construction, design, factory organization and costing. Materials worked include metals, woods and plastics. During the summer, the student will work in the industry.

CAREER PROSPECTS: Graduates of the program may find employment in one or more of the following crafts: furniture manufacturing; furniture production line employee; estimator; upholstery; re-upholstery; furniture repair; furniture refinishing; production supervisor; production scheduling; furniture merchandise manager; furniture sales; furniture consultant; cabinet maker; display equipment specialist; interior decorator advisor; office furniture specialist.

OPTIONS: Woodworking, finishing, upholstery

COURSES:

SEMESTER 1	15 WEEKS
FURN101	Cabinet and Chairmaking I
FURN102	Wood Machining I
FURN103	Furniture Finishing I
FURN104	Upholstery I
FURN105	Materials I
FURN106	Technical Drawing and Blueprint Reading
FURN108	Furniture Production Management I
AUD100	Audit Relevant Courses—Course Projects
RSCH100	Research and Survey—Course Projects
FURN107	Design Interiors
SBM135	Math/Small Business Management

SEMESTER 2	17 WEEKS
FURN151	Cabinet and Chairmaking II
FURN162	Wood Machining II
FURN163	Woodwork Finishing II
FURN154	Upholstery II
FURN155	Materials II
FURN156	Technical Drawing II
FURN158	Furniture Production Management II
AUD150	Audit Relevant Courses—Course Projects
RSCH150	Research and Survey—Course Projects
FURN157	Design Interiors
ENG152	Vocabulary of Furnishing I

SEMESTER 3	15 WEEKS
Option 1—Woodworking	
FURN205	Materials III
FURN207	Furniture Design II and Interiors
FURN208	Furniture Production Management III
FURN202	Wood Machine (with FURN201)
FURN201	Cabinet and Chairmaking III
AUD202	Audit Relevant Courses—Course Projects
RSCH202	Research and Survey—Course Projects
FURN206	Technical Drawing III
SBM232	Maths/Small Business Management
FURN210	Plastics and Metals in Furniture

SEMESTER 4	17 WEEKS
FURN255	Materials IV
FURN257	Design and Interiors IV
FURN258	Furniture Production Management IV
FURN262	Wood Machining IV
FURN251	Cabinet and Chairmaking IV
AUD250	Audit Relevant Courses—Course Projects
RSCH250	Research and Survey—Course Projects
FURN256	Technical Drawing IV
FURN211	Plastics and Metals in Furniture
ENG252	Furnishing Terminology III

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SEMESTER 3	15 WEEKS
Option 2—Finishing	
FURN205	Materials III
FURN207	Furniture Design II and Interiors
FURN208	Furniture Production Management III
FURN209	Style Colour Textile I
FURN203	Finishings III
AUD202	Audit Relevant Courses—Course Projects
RSCH202	Research and Survey—Course Projects
FURN206	Technical Drawing III
SBM232	Maths/Small Business Management
FURN210	Plastics and Metals in Furniture

SEMESTER 4	17 WEEKS
FURN255	Materials IV
FURN257	Design and Interiors IV
FURN258	Furniture Production Management IV
ENG252	Furnishing Terminology III
FURN263	Finishings IV
AUD250	Audit Relevant Courses—Course Projects
RSCH250	Research and Survey—Course Projects
FURN259	Styles Colour Texture II
FURN256	Technical Drawing IV
FURN211	Plastics and Metals in Furniture

SEMESTER 3	15 WEEKS
Option 3—Upholstery	
FURN205	Materials III
FURN207	Furniture Design II and Interiors
FURN208	Furniture Production Management III
SBM232	Maths/Small Business Management
FURN204	Upholstery III
AUD202	Audit Relevant Courses—Course Projects
RSCH202	Research and Survey—Course Projects
FURN215	Drapes and Slipcovers I
FURN214	Antique Upholstered Furniture

SEMESTER 4	17 WEEKS
FURN255	Materials IV
FURN257	Design and Interiors IV
FURN258	Furniture Production Management IV
ENG252	Furnishing Terminology III
FURN254	Upholstery IV
AUD250	Audit Relevant Courses—Course Projects
RSCH250	Research and Survey—Course Projects
FURN264	Antique Upholstered Furniture
FURN265	Drapery and Slipcovers II

FURNITURE—WOODWORKING AND FINISHING

GBC Code FT544 **Starting:** September
Kensington Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Good English comprehension.

ABOUT THE PROGRAM: The household furniture industry in Canada numbers well over 700 production plants and 1,800 custom shops. Of this number, over two-thirds are in Ontario.

The industry is engaged not only in the production of furniture for home use, but construction of fixtures, cabinets, racks and industrial equipment for retailers, manufacturers, service agencies and others.

Practitioners of the art must be familiar with finishing and refinishing techniques for both new and old furniture and woodwork. They must also be knowledgeable in the application of compounds of both natural and synthetic origin in the preservation, repair and maintenance of furniture and related items.

Workers in the industry deal with such diverse tasks as refurbishing used furniture; constructing wooden parts for equipment; removing or re-applying finishes and/or building items to meet specific requirements.

While manual skills are emphasized, the course content includes many aspects of production engineering and mathematics to enable the participant to deal more effectively with the problems at hand.

Under the direction of skilled professionals, students are rapidly engaged in the various crafts necessary to achieve the appropriate degree of readiness for the industry. Many are able to become entrepreneurs.

CAREER PROSPECTS: Graduates are prepared for many of the following positions in both industrial and retail establishments: furniture touch-up; furniture restorer; furniture builder; furniture production line employee; woodworker; warehouse furniture repairer; piano and organ refinisher; interior decorator assistant; display equipment repair; specialty woodworking; cabinet making assistant; parts assembler; estimator; repair instructor; purchasing assistant.

COURSES:

SEMESTER 1	16 WEEKS
FURN552	Refinishing and Shop
WOOD552	Woodworking—Shop
WOOD551	Woodworking—Theory
FURN554	Finishing—Theory
MATH534	Mathematics for Furniture Design I
AUD500	Audit Relevant Courses—Course Projects
RSCH500	Research and Survey—Course Projects

SEMESTER 2	16 WEEKS
WOOD562	Woodworking—Shop
FURN562	Woodwork, Finishing and Refinishing
WOOD561	Woodworking—Theory
FURN564	Refinishing—Theory
AUD510	Audit Relevent Courses—Course Projects
RSCH510	Research and Survey—Course Projects
ENG562	Language and Communications

FURNITURE UPHOLSTERY (REPAIR)

GBC Code FT545 **Starting:** Continuously
Kensington Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Evidence of manual dexterity and good English comprehension.

ABOUT THE PROGRAM: The furniture industry in Canada numbers well over 700 production plants and 1800 custom shops. Of this number, about two-thirds are located in Ontario, primarily in Toronto and in the Kitchener-Waterloo area.

Upholsterers make or repair padded and covered furniture on a pre-built frame. However, they are not limited to production for home use.

Their skills are needed in business establishments such as hotels, restaurants, automotive and aircraft manufacturing as well as in retailing and industrial operations.

Opportunities exist either in furniture factories, upholstery shops or as entrepreneurs in one of the many facets of this industry.

Upholsterers not only build and repair furniture, but are employed in many specialties related to such activities: cutting fabric for use in upholstery; sewing parts together; making seats or arms or backs; reinforcing weakened areas; creating new designs; advising clients re upholstery purchases.

Most upholstery work is done with the hands, consequently the tasks required would be most appealing to skill-oriented individuals.

CAREER PROSPECTS: As the new employee acquires more experience, advancement is possible to custom work and design and to creative, stimulating work.

Positions available in this industry include: Production line employees such as: upholsterers; cutters; sewers; seat makers; arm makers; back makers; cushion fillers; estimators.

In related areas of upholstery involvement such as interior decorator, workroom and furniture stores and warehouses: workroom assistant; repair employee; repair instructor; estimator; salesperson for furniture; furniture accessories or parts; purchasing assistant (for materials, parts); repair supervisor.

COURSES:

SEMESTER 1	20 WEEKS
FURN553	Upholstery, Stuffing, Cutting, Sewing
AUD500	Audit Relevant Courses—Course Projects
RSCH500	Research and Survey—Course Projects
MATH535	Business Mathematics

SEMESTER 2	20 WEEKS
FURN563	Upholstery, Stuffing, Cutting, Sewing
ENG562	Language and Communications
AUD510	Audit Relevant Courses—Course Projects
RSCH510	Research and Survey—Course Projects

JEWELLERY ARTS

GBC Code FT102 **Starting:** September
Casa Loma Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, or equivalent. Qualified applicants will complete a questionnaire and submit an art portfolio.

BACKGROUND: Good eyesight (corrected vision is accepted), a high degree of manual dexterity, mechanical inclination, patience, initiative and artistic sense are the necessary qualities for a person to succeed in this field.

ABOUT THE PROGRAM: In the Jewellery Arts Program, students learn all the various aspects of jewellery-making. The emphasis during the first two years of training is on various jewellery-making techniques in the manufacturing and custom design of jewellery items. Students design their own course projects and develop them into jewellery items by using precious metals and jewels. In the third year, students select one of the following six areas of specialization:

- Silversmithing
- Engraving
- Gemsetting
- Goldsmithing
- Model Making
- Jewellery Repair—Practical

CAREER PROSPECTS: Upon completion of the program, graduates may find employment in jewellery manufacturing, custom studios, or jewellery stores.

COURSES:

SEMESTER 1	15 WEEKS
JWL160	Introduction to Jewellery
MET166	Metallurgy I
GEM167	Gemmology I
JWL166	Grinding and Polishing
DES169	Design I
ENA170	Enamelling I
JWL165	Theory of Specialty

SEMESTER 2	19 WEEKS
MET176	Metallurgy II
GEM177	Gemmology II
JWL176	Grinding and Polishing
DES179	Design II
JWL175	Theory of Specialty
ENA180	Enamelling
JWL171	Goldsmithing
JWL172	Gemsetting
JWL173	Engraving
JWL174	Silversmithing

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SEMESTER 3 15 WEEKS

MET266	Metallurgy III
GEM267	Gemmology III
DES269	Design
JWL251	Jewellery Repairs
JWL261	Goldsmithing III (Major Option)
JWL265	Theory of Specialty
ELECT000	Elective

Choose 1 of the following 4 electives.

JWL202	Gemsetting
JWL203	Engraving
JWL204	Silversmithing
ENA270	Enamelling

SEMESTER 5 15 WEEKS

Option 1—Silversmithing

JWL364	Silversmithing V
SBM132	Small Business Management
DES369	Jewellery Design
JWL351	Jewellery Repairs
JWL365	Theory of Specialty
MET266	Metallurgy III

SEMESTER 5 15 WEEKS

Option 2—Engraving

JWL363	Engraving V
SBM132	Small Business Management
DES369	Jewellery Design
JWL365	Theory of Specialty
MET266	Metallurgy III

SEMESTER 5 15 WEEKS

Option 3—Gemsetting

JWL362	Gemsetting V
SBM132	Small Business Management
GEM367	Diamond Grading & Evaluation
JWL365	Theory of Specialty
GEM267	Gemmology III

SEMESTER 5 15 WEEKS

Option 4—Goldsmithing

JWL361	Goldsmithing V
SBM132	Small Business Management
GEM367	Diamond Grading and Evaluation
DES369	Jewellery Design
JWL365	Theory of Specialty
JWL351	Jewellery Repairs

SEMESTER 4 19 WEEKS

MET276	Metallurgy IV
GEM277	Gemmology IV
DES279	Design IV
JWL252	Jewellery Repairs
JWL271	Goldsmithing IV
JWL275	Theory of Specialty
ELECT000	Elective

Choose 1 of the following 4 electives.

JWL277	Gemsetting
JWL278	Engraving
JWL279	Silversmithing
ENA280	Enamelling

SEMESTER 6 19 WEEKS

JWL374	Silversmithing VI
SBM142	Small Business Management
DES379	Jewellery Design
JWL352	Jewellery Repairs
JWL375	Theory of Specialty
MET276	Metallurgy IV

SEMESTER 6 19 WEEKS

JWL373	Engraving VI
SBM142	Small Business Management
DES379	Jewellery Design
JWL375	Theory of Specialty
MET276	Metallurgy IV

SEMESTER 6 19 WEEKS

JWL372	Gemsetting VI
SBM142	Small Business Management
GEM377	Diamond Grading and Evaluation
JWL375	Theory of Specialty
GEM277	Gemmology IV

SEMESTER 6 19 WEEKS

JWL371	Goldsmithing VI
SBM142	Small Business Management
GEM377	Diamond Grading and Evaluation
DES379	Jewellery Design
JWL375	Theory of Specialty
JWL352	Jewellery Repairs

SEMESTER 5 15 WEEKS

Option 5—Model Making

JWL305	Model Making
DES369	Jewellery Design
JWL365	Theory of Specialty
GEM267	Gemmology III
MET266	Metallurgy III

SEMESTER 5 15 WEEKS

Option 6—Jewellery Repair Practical

JWL306	Jewellery Repair Practical
SBM132	Small Business Management
JWL365	Theory of Specialty
GEM367	Diamond Grading and Evaluation

SEMESTER 6 19 WEEKS

JWL315	Model Making
DES379	Jewellery Design
JWL375	Theory of Specialty
GEM277	Gemmology IV
MET276	Metallurgy IV

SEMESTER 6 19 WEEKS

JWL316	Jewellery Repair Practical
SBM142	Small Business Management
JWL375	Theory of Specialty
GEM377	Diamond Grading and Evaluation

JEWELLERY REPAIRS

GBC Code FT402 **Starting:** September
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Some work experience in the jewellery industry, a recommendation from the Canadian Jewellers Institute or by the applicant's employer, and a successful interview by the staff of the Jewellery Arts Department.

Good eyesight (corrected vision is acceptable) and good mechanical abilities are essential.

ABOUT THE PROGRAM: The jewellery repair craft person must be skilled in working with precious and semi-precious metals to shape, by hand, missing pieces, solder, grind, polish and finish the surface of the ornament to the same high standards as were demanded for the original production.

The program at George Brown College is organized so that students progress from simple to more complex repairs as their skills improve with practice. Among the repairs performed are ring sizing, re-tipping, replacement of claws, replacement of settings, chain soldering, replacement of various fittings and findings and many other repairs which are daily performed in the industry. Students also study gemmology, diamond grading and jewellery design to be able to restore the missing pieces to preserve the appearance of the original design, and to avoid costly mistakes.

CAREER PROSPECTS: Jewellery repair specialists are in demand in many retail jewellery operations, large jewellery repair departments and in some wholesale establishments. Many also elect to establish their own businesses.

COURSES:

SEMESTER 1	15 WEEKS
JWL466	Jewellery Repair Practical
SBM410	Small Business Management
JWL411	Theory of Specialty
GEM411	Diamond Grading and Evaluation
DES469	Design I
GEM412	Gemmology III

SEMESTER 2	19 WEEKS
JWL476	Jewellery Repair Practical
SBM420	Small Business Management
JWL421	Theory of Specialty
GEM421	Diamond Grading and Evaluation
DES479	Design II
GEM422	Gemmology IV

ENGRAVING

GBC Code FT403 **Starting:** September
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Some work experience in the jewellery industry, a recommendation by the Canadian Jewellers Institute or by the applicant's employer, and a successful interview by the staff of the Jewellery Arts Department.

Good eyesight or corrected vision and manual dexterity is essential.

ABOUT THE PROGRAM: Hand engraving is an ancient art which is still very much appreciated. The skill of writing in metal is both artistic and technically demanding. It involves a number of styles of writing as well as the making of seals, coats of arms, dies, and other types of decorative designs in metal.

The engraver must be able to transfer designs to metal, and then by using a variety of hand tools specially prepared for the job at hand, artistically cut away the excess metal to make the design permanent.

In this program, the students are taught to prepare the various types of engraving tools, drawing on metal and layout, cutting of curved lines and circles, transferring of designs, cutting of monograms and engraving of crests and coats of arms. Students also learn the elements of ornamental engraving, wriggling and wide cuts, engraving of Goth, Roman, Block and old English letters, engraving on difficult surfaces such as the inside of rings, concave and convex surfaces, engraving on steel and many other techniques.

CAREER PROSPECTS: Because of the small number of specialists in this field, the employment opportunities are excellent either in jewellery repair shops, manufacturing establishments or in independent businesses.

COURSES:

SEMESTER 1	15 WEEKS
JWL417	Engraving V
SBM410	Small Business Management
DES410	Jewellery Design
JWL411	Theory of Specialty
MET410	Metallurgy III

SEMESTER 2	19 WEEKS
JWL427	Engraving VI
SBM420	Small Business Management
DES420	Jewellery Design
JWL421	Theory of Specialty
MET420	Metallurgy IV

GEM SETTING

GBC Code FT404 **Starting:** September
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Some work experience in the jewellery industry, a recommendation from the Canadian Jewellers Institute or by the applicant's employer, and a successful interview by the staff of the Jewellery Arts Department.

Good eyesight or corrected vision is essential.

ABOUT THE PROGRAM: Gem setting is a highly technical skill requiring extensive knowledge of precious and semi-precious gemstones and materials, as well as techniques for applying them to various jewellery items.

The students learn how to prepare various types of settings to receive the stone, and the actual curving of the metal to secure it. In the process, they use a number of different tools such as the flex shaft, different burs, setting blocks, pliers, hammers, chasing tools, purshers, beading tools and others to create a variety of settings.

They are taught the skills of bezel setting, claw setting, bead setting, setting of jewel clusters and fancy shapes such as baquette and marquise. The work is performed on several metals and alloys of different hardnesses as well as on straight and curved surfaces. The retipping with and without stones in the settings is also practiced.

The pleasure of working with gems is augmented by substantial material rewards for a good craftsperson in this field.

CAREER PROSPECTS: Most gemsetters find employment with jewellery manufacturers, but they can also be self-employed or work for larger jewellery repair establishments.

COURSES:

SEMESTER 1	15 WEEKS
JWL418	Gemsetting
SBM410	Small Business Management
GEM411	Diamond Grading and Evaluation
JWL411	Theory of Specialty
GEM412	Gemmology III

SEMESTER 2	19 WEEKS
JWL428	Gemsetting
SBM420	Small Business Management
GEM421	Diamond Grading and Evaluation
JWL421	Theory of Specialty
GEM422	Gemmology IV

WATCHMAKING

GBC Code FT111 **Starting:** September
St. James Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level or equivalent.

BACKGROUND: Any hobby involving work with small mechanisms would be beneficial.

Good eyesight (corrected vision is accepted) and mechanical reasoning abilities are essential.

ABOUT THE PROGRAM: The watchmaking trade in Canada consists of highly skilled artisans whose numbers are diminishing rapidly.

Since the average age of watch repairers is well over 50, attrition will undoubtedly reduce their number substantailly due to oncoming retirement.

The new technology in watchmaking requires increased knowledge and new techniques by those engaged in the art of maintenance and repair. Hence, the shortage of qualified personnel is compounded by the need to retrain those already in the field.

Skills acquired in watchmaking and repair are often readily adaptable to other industries in which precision instruments represent a significant portion of the product.

The program at George Brown is taught by skilled professionals in an industry-type environment, under close and virtually continuous supervision.

Operating with both traditional equipment as well as the most modern of electronic devices, the student is trained to recognize each of the various types of mechanisms used in the watch industry; to evaluate performance; to diagnose problem areas and effect the appropriate repairs in the most efficient manner.

CAREER PROSPECTS: There is a large demand for graduates of this program. Indeed, the personnel requirements of the industry have not been fulfilled for many years.

Graduates of the program may be engaged in either their own enterprises, or in organizations such as manufacturers, wholesalers and retailers who require servicing of finely crafted devices.

Such positions are available not only in traditional jewellery stores, but general department and specialty stores as well as manufacturers of specialty instruments, electronic and mechanical for industrial use.

Successful completion of the program provides eligibility for examination by the province of Ontario for a Certificate of Qualification, which is required to practice watchmaking in Ontario.

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COURSES:

SEMESTER 1	15 WEEKS
WACH132	Basic Tools
WACH133	Balance Work
WACH134A	Watchmaking Skills
WACH135A	Basic Turning
WACH136A	Watchmaking Theory
MET130A	Metallurgy 1
MATH164	Mathematics for Watchmaking
ENG126	Language and Communications
WACH137	Identification of Watch Movements

SEMESTER 2	17 WEEKS
WACH134B	Watchmaking Skills
WACH139	Watch Overhaul
WACH140	Case Repairs
WACH136B	Watchmaking Theory
WACH135B	Basic Turning
MET130B	Metallurgy 1
MATH165	Mathematics for Watchmaking
WACH138	Ordering Parts and Nomenclature
ENG127	Language and Communications

SEMESTER 3	15 WEEKS
WACH233A	Hairspring Work
WACH225	Escapement Matching
WACH231A	Watchmaking Skills
WACH234A	Watch Overhaul
WACH232A	Theory of Watchmaking
ENDR143A	Drafting
SMB132	Small Business Management

SEMESTER 4	19 WEEKS
WACH235	Lathe Work
WACH233B	Hairspring Work
WACH231B	Watchmaking Skills
WACH236	Introduction to Quartz Watches
WACH234B	Watch Overhaul
WACH232B	Theory of Watchmaking
PHY121	Physics
SBM142	Small Business Management
ENDR143B	Drafting

SEMESTER 5	15 WEEKS
WACH337	Lathe Work
WACH338	Hairspring Work
WACH339A	Watchmaking Skills
WACH340A	Watch Overhaul
WACH3341A	Watchmaking Theory
WACH335A	Applied Electronics
EC212	Economics

SEMESTER 6	19 WEEKS
WACH339B	Watchmaking Skills
WACH340B	Watch Overhaul
WACH342	Balance and Tuning Fork Electronic Watch Servicing
WACH341B	Watchmaking Theory
WACH335B	Applied Electronics
EC212	Economics

CLOCKMAKING

GBC Code FT112 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in year 3 and 4 at or above the general level, or equivalent standing from other schools. Mature students (19 years of age and over) with less than high school will be considered and accepted upon an interview by the staff of the Watchmaking Department.

BACKGROUND: Any hobby involving work with small mechanisms would be beneficial. Good eyesight (corrected vision is accepted) and mechanical reasoning abilities are essential.

ABOUT THE PROGRAM: The Clockmaking Program is structured so that the students first learn the skills needed to perform basic repairs on simple clocks. As new skills are acquired, the work becomes progressively more complex by introducing more complicated clocks into the program. The skills of sawing, filing and lathework are constantly used to make or alter parts needed for repair and restoration of older clocks for which materials are not available.

The theory of clockmaking provides the knowledge about different scientific principles employed in the construction and operation of clocks. It serves as the basis for planning and layout of parts that have to be designed and made as well as for troubleshooting and precision regulation. The theory and the practical work are coordinated as much as possible so that they mutually reinforce one another.

CAREER PROSPECTS: Graduates of the clockmaking program may find employment in retail jewellery stores, wholesale companies, specialty clock shops and as independent clock repairers.

COURSES:

SEMESTER 1	15 WEEKS
CLCK150	Clock Overhaul (Introduction)
CLCK151	Lathework
CLCK152	Filing
CLCK153	Sawing
CLCK155	Clockmaking Theory
MET130A	Metallurgy
MATH136	Mathematics
ENG	Language and Communications

SEMESTER 2	19 WEEKS
CLCK160	Clock Overhaul (Basic)
CLCK161	Lathework
CLCK164	Escapement Making and Adjustment
CLCK163	Clockmaking Skills
CLCK165	Clockmaking Theory
MET130B	Metallurgy
MATH136	Mathematics
ENG	Language and Communications

SEMESTER 3	19 WEEKS
CLCK250	Clock Overhaul (Intermediate)
CLCK251	Gear Cutting
CLCK254	Escapement Making and Repair
CLCK253	Clockmaking Skills
CLCK255	Clockmaking Theory
ENDR143A	Drafting
SBM132	Small Business Management

SEMESTER 4	19 WEEKS
CLCK260	Clock Overhaul (Advanced)
CLCK261	Lathework
CLCK264	Escapement Matching
CLCK262	Balance ands Hairspring Work
CLCK263	Clockmaking Skills
CLCK265	Clockmaking Theory
ENDR143B	Drafting
SBM142	Small Business Management
PHY121	Physics

COMMERCIAL CERAMICS

GBC Code FT105 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grade 11 and 12 at or above the general level, or equivalent. Demonstrated artistic ability would be a distinct asset.

ABOUT THE PROGRAM: Although the ceramics industry today can be roughly divided into three areas, namely industrial, commercial and art studio, the basic skills and knowledge span all three specialized fields. The difference is mainly in the type of product and the need it satisfies in society.

The commercial ceramics industry in Canada today produces table and cooking ware, decorative items, flower and garden ware, wall and floor coverings, as well as works of art for decorative purposes. Using largely natural materials such as clay and other minerals, it provides Canadian society with many of the items it needs in practical use and at the same time is capable of fulfilling its aesthetic desires and aspirations. While requiring artistic ability, the program is also directed towards mastering various technical skills involved in producing ceramic objects.

Modern ceramics technology at all levels requires extensive knowledge in material preparation, chemistry of materials, production design, product decoration, glazing and different surface finishing and the kiln technology for firing the materials.

The program at George Brown is designed to satisfy the students' desire for artistic expression as well as to master the technology of ceramic production. Well-planned shop assignments leave the student the freedom of expression of his/her artistics inclination while at the same time demand the mastering of techniques needed to complete the assignment.

CAREER PROSPECTS: Successful completion of the program can lead to a number of interesting positions in ceramics design, production supervision, kiln technology, mould making and other positions in the industry. Some graduates find it satisfying and profitable to start their own business, or to work for small ceramic establishments.

COURSES:

SEMESTER 1	15 WEEKS
DES101	Design Studies
CER102	Ceramic Production and Design
CER103	Ceramics Techniques
CER106	Mould Making
CER107	Clay and Glaze Technology (Theory and Practice)
CHEM101	Chemistry for Ceramics
ENG141	Language and Communications I

SEMESTER 2	19 WEEKS
DES150	Design Studies
CER152	Ceramic Production and Design
CER153	Ceramic Techniques
CER156	Mould Making
CER157	Clay and Glaze Technology (Theory and Practice)
CHEM151	Chemistry for Ceramics
ENG182	Language and Communications II

SEMESTER 3	15 WEEKS
DES201	Commercial Design Studies
HIST202	Ceramic Art History
CER202	Commercial Ceramic Production and Design
CER203	Commercial Techniques
CER206	Mould Making
CER207	Ceramic Technology
CER208	Kiln Technology
SBM155	Business Management Studies for Ceramics

SEMESTER 4	19 WEEKS
DES251	Commercial Design Studies
HIST252	Ceramic Art History
CER252	Commercial Ceramic Production and Design
CER253	Commercial Tehniques
CER256	Mould Making
CER257	Ceramic Technology
CER258	Kiln Technology
SBM165	Business Management Studies for Ceramics

Graphic Arts

GRAPHIC DESIGN

GBC Code G102 **Starting:** September
St. James Campus **Certification:** Diploma
6 Semesters
Optional third year, Semesters 5 and 6

PREREQUISITES: Ontario Secondary School Graduation Diploma, or equivalent.

BACKGROUND: Credits in art.

SELECTION PROCEDURE: Applicants must submit a portfolio of ten art samples and perform an art test.

ABOUT THE PROGRAM: The two-year Graphic Design Diploma Program is formulated and organized to develop students' skills and abilities to the highest level of competence in the fields of graphic design and advertising arts. Upon graduation, students are prepared to pursue careers starting as junior artists which lead to professional status in the advertising arts industry. The industry offers diversity and exceptional opportunities for personal and professional growth.

Third year students further develop their skills and abilities and learn to produce artwork of professional quality and excellence. During this year, students develop a solid understanding of art studio operation and the many relationships and functions in the advertising arts industry. First hand facts and information are obtained through field trips to specific businesses and personal contact with management and working professionals. The "field work" program provides students with a greater insight into the various work environments within the industry. Special emphasis is given to creating a highly professional portfolio.

Graduates receive diplomas after the second and third years.

CAREER PROSPECTS: Students of the graphic design program are prepared to meet the requirements of the industry. Graduates obtain positions in advertising agencies, graphic design studios, art studios, packaging companies, major retail organizations, film production studios, printing companies, publishing companies and corporations that operate in-house art and advertising departments. Metropolitan Toronto is Canada's largest centre for graphic arts and offers more opportunities in advertising arts and graphic design than any other region in Canada.

COURSES:

SEMESTER 1	15 WEEKS
DRAW120	Drawing Research
LIFE121	Life Drawing
LETT122	Lettering
DES123	Design
COLR124	Science of Colour
PRNT125	Graphic Reproduction Studies
MECH126	Mechanicals
HIST127	History of Design
ILLS128	Illustration Techniques
TYPO129	Typographical Design
MRK131	Marker Rendering Techniques

SEMESTER 2	19 WEEKS
DRAW120	Drawing Research
LIFE121	Life Drawing
LETT122	Lettering
DES123	Design
COLR124	Science of Colour
PRNT125	Graphic Reproduction Studies
HIST127	History of Design
ILLS128	Illustration Techniques
TYPO129	Typographical Design
STGR130	Studio Graphics

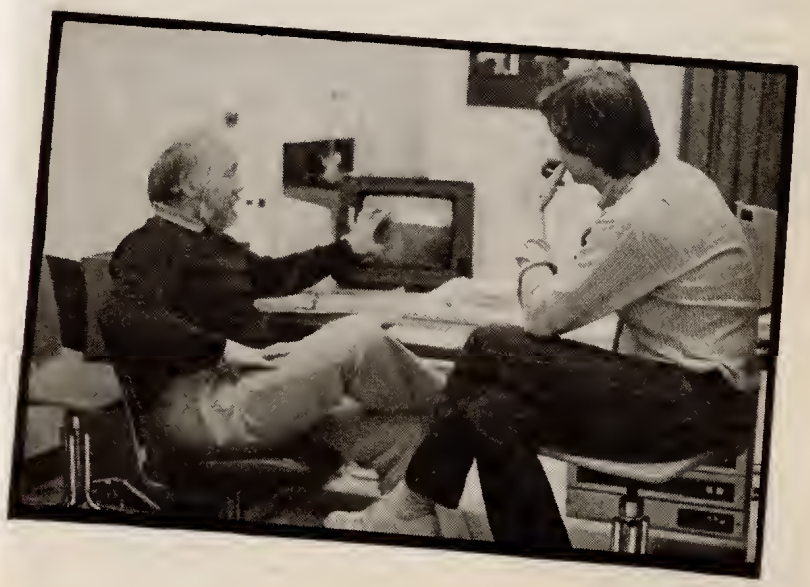
SEMESTER 3	15 WEEKS
LIFE221	Life Drawing
ILLS228	Illustration
STGR230	Studio Graphics
CORP231	Corporate Design
TVGR233	TV Graphics
ADES234	Advertising Design
PHOT235	Photographic Design
ADES236	Retail Advertising
TYPT232	Typography and Reproduction

SEMESTER 4	19 WEEKS
LIFE221	Life Drawing
ILLS228	Illustration
STGR230	Studio Graphics
CORP231	Corporate Design
TVGR233	TV Graphics
ADES234	Advertising Design
PHOT235	Photographic Design
ADES236	Retail Advertising
TYPT232	Typography and Reproduction

SEMESTER 5	15 WEEKS
COPY300	Copywriting
ILLS328	Illustration
STGR330	Studio Graphics
CORP331	Corporate Design
ADES334	Advertising Design
STBM339	Studio Business Management
PRGM337	Computer Graphics
TVGR333	TV Graphics

SEMESTER 6	19 WEEKS
COPY300	Copywriting
ILLS328	Illustration
STGR330	Studio Graphics
CORP331	Corporate Design
TVGR333	TV Graphics
ADES334	Advertising Design
STBM339	Studio Business Management
PRGM337	Computer Graphics

These courses will be taken alternately (e.g.: TVGR in Semester 1 and PHOT235 in Semester 2 or PHOT235 in Semester 1 and TVGR233 in Semester 2).



COMMERCIAL ART

GBC Code G543 **Starting:** January, June and October
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Grade 10 or equivalent. All applicants must submit a portfolio of eight to ten realistic drawings and pass an art test. Tests are carried out every Wednesday at 2:00 p.m. in Room 205, St. James Campus. An appointment is mandatory. Please call (416) 967-1212, ext. 3318 to make an appointment.

ABOUT THE PROGRAM: The Commercial Art program introduces students to the ideas, techniques and attitudes of the graphic profession.

The object of this program is to have the students become more effectively aware of communications between the artist and client as well as all phases of the printing reproduction processes.

Complete assignments or projects will be developed from concept through discussion roughs to felt-pen presentations with particular attention to the development and presentation of finished art for printing production. The objective is a professional level portfolio upon graduation.

CAREER PROSPECTS: There is an excellent employment rate for graduates. Upon graduation, students obtain positions in commercial art studios, film production houses, printing and publishing companies and major corporations that operate in-house advertising and art departments.

COURSES:

SEMESTER 1	20 WEEKS
DRAW500	Basic Drawing
PROD501	Product Rendering
LETT502	Lettering and Typography
ADES503	Advertising Design 1
FORM504	Form Design and Ruling

SEMESTER 2	20 WEEKS
PACK510	Package Design
ADES511	Advertising Design II
PROM512	Promotional Design
CORP513	Corporate Design
TYPO515	Typography
COMP517	Videotex/Computer Graphics

PRINTING TECHNICIAN

GBC Code G100 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Basic Level Graduation Diploma with credits in English and mathematics in Grade 12 at or above the basic level, or equivalent. Any science, physics, or chemistry background is recommended. All applicants must attend an interview, mechanical reasoning test, colour vision test, and tour of the Printing Technology Department.

BACKGROUND: Drafting techniques, mechanical aptitude, typing skills, and creative interests are all useful in various areas of print technology.

ABOUT THE PROGRAM: The printing industry is one of the largest employers in the Toronto area, which in turn is known as a centre of superior quality printing technology.

The printing technology department has modern presses, phototypesetting and computer typesetting equipment, process camera, electronic colour scanner, stripping, platemaking and bindery equipment. Technicians in the 2-year program take "hands-on" technical training in four major areas for each of the two years: e.g. presswork, phototypesetting, camera/stripping, and bindery.

CAREER PROSPECTS: Printing technicians may find employment at the introductory levels of traditional craft areas such as typographic composition (phototypesetting, layout, paper and film assembly), or pre-press preparatory work (camera operation, film imposition, platemaking), or press operation (in a supervised capacity tending offset, rotogravure or flexographic presses), or binding and finishing, (operating computerized cutters, folders). The scope of applicability of these technical functions is only limited by the reduced program length (as compared to Printing Technology).

COURSES:

SEMESTER 1	16 WEEKS
COMP100	Introduction to Computer Typesetting
COMP110	Paper and Film Assembly (Paste-up)
CAM100	Photomechanical Reproduction
PSP100	Film Imposition/Printing Surface Preparation
LTPR100	Machine Printing Letterpress
LITH100	Machine Printing (Offset)
LITH110	Machine Printing Offset
BIND100	Binding and Finishing
MATH128	Mathematics
ENG144	Language and Communications
SC128	Basic Science (Physics and Chemistry)

SEMESTER 2	16 WEEKS
COMP100	Introduction to Computer Typesetting
COMP110	Paper and Film Assembly (Paste-up)
CAM100	Photomechanical Reproduction
PSP100	Film Imposition/Printing Surface Preparation
LTPR100	Machine Printing Letterpress
LITH100	Machine Printing (Offset)
LITH110	Machine Printing Offset
BIND100	Binding and Finishing
MATH128	Mathematics
ENG144	Language and Communications
PHY129	Physics

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SEMESTER 3	16 WEEKS
Note: Students must either type 40 wpm or be prepared to take a Lumisonic Typing course.	
COMP200	Phototypesetting Keyboard/ Operation Concept
CAM200	Photomechanical Reproduction
PSP200	Film Imposition/Printing Surface Preparation
ROTO200	Machine Printing Rotogravure
LITH220	Machine Printing Offset
BIND200	Binding and Finishing
LITH230	Machine Printing Web Offset
FLEX200	Machine Printing Flexography
CHEM228	Chemistry
MATH228	Mathematics
ENG244	Language and Communications

SEMESTER 4	16 WEEKS
COMP200	Phototypesetting Keyboard/ Operation Concept
CAM200	Photomechanical Reproduction
PSP200	Film Imposition/Printing Surface Preparation
ROTO200	Machine Printing Rotogravure
LITH220	Machine Printing Offset
BIND200	Binding and Finishing
LITH230	Machine Printing Web Offset
FLEX200	Machine Printing Flexography
SC228	Quality Control
ELECT000	Elective
Choose 1 of the following 2 electives	
ENG245	Opportunities in Printing
ENG246	Effective Oral Communications

PRINTING TECHNOLOGY

GBC Code G101 **Starting:** September
St. James Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in English and mathematics in Grade 12 at or above, the general level, or equivalent. Grade 12 chemistry and Grade 11 physics are recommended. All applicants must attend an interview, mechanical reasoning test, colour vision test, and tour of the Printing Technology Department.

BACKGROUND: Drafting techniques, mechanical aptitude, typing skills, and creative interests are all useful in various areas of printing technology.

ABOUT THE PROGRAM: The printing industry is one of the largest employers in the Toronto area which, in turn, is known as a centre of superior quality printing companies.

The Printing Technology Department has modern presses, phototypesetting and computer typesetting equipment, process camera, an electronic colour scanner, stripping, platemaking and bindery equipment. Technologists in the 3-year program take hands-on technical training in four major areas for each of the first two years, and then select from either preparatory or machine areas in which to specialize in the third year.

CAREER PROSPECTS: Relative to the selection of third year technical specialization, printing technologists may find employment in the traditional craft areas of typographic composition (computer typesetting, mark-up, layout, paper and film assembly), or pre-press preparatory work (camera operation, colour separation, film imposition, platemaking), or press operation (tending various offset presses, rotogravure, or flexographic presses), or binding and finishing (operating computerized cutters and other precision equipment for folder, stitching, assembling). In addition, there are employment opportunities in areas of quality assurance and introductory management functions (hardware applications and purchasing, technical service/repair, production control, estimating, marketing and sales).

COURSES:

YEAR 1	32 WEEKS
COMP100	Introduction to Computer Typesetting
COMP110	Paper and Film Assembly (Paste-up)
CAM100	Photomechanical Reproduction
PSP100	Film Imposition/Printing Surface Preparation
LTPR100	Machine Printing Letterpress
LITH100	Machine Printing (Offset)
LITH110	Machine Printing Offset
BIND100	Binding and Finishing
PHY131	Physics (Semester 1)
MATH131	Mathematics (Semester 1)
ENG144	Language and Communications (Semester 1)
CHEM131	Chemistry (Semester 1)
PHY132	Physics (Semester 2)
MATH132	Mathematics (Semester 2)
ENG145	Language and Communications (Semester 2)
CHEM132	Chemistry (Semester 2)

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YEAR 2 32 WEEKS

Note: Students must either type 40 wpm or be prepared to take a Lumisonic Typing course.

COMP200	Phototypesetting Keyboard/ Operation Concept
CAM200	Photomechanical Reproduction
PSP200	Film Imposition/Printing Surface Preparation
FLEX200	Machine Printing Flexography
ROTO200	Machine Printing Rotogravure
LITH230	Machine Printing Web Offset
LITH220	Machine Printing Offset
BIND200	Binding and Finishing
SC231	Quality Control (Semester 3)
PHY231	Physics (Semester 3)
MATH231	Mathematics (Semester 3)
ENG244	Language and Communications (Semester 3)
AUD203	Lumisonic Typing (Semester 3)
SC232	Quality Control (Semester 4)
PHY232	Physics (Semester 4)
MATH232	Mathematics (Semester 4)
ELECT000	Elective (Semester 4)

Choose 1 of the following 2 Electives

ENG245	Opportunities in Printing
ENG246	Effective Oral Communications

YEAR 3 32 WEEKS

In year 3 students will select the area in which they wish to specialize by choosing one of the four options. Students in any option will take all the courses listed in that option, plus two technical elective courses from other option areas. A selection of electives from business courses must be taken and the types of courses normally available are as follows: Psychology, Statistics, Economics, Data Processing, Accounting, and Business Mathematics. Business electives must total a minimum of 255 course hours for the year.

Option 1—Typographic Composition

COMP300	Phototypesetting Tape Input
COMP310	Advanced Keyboard Techniques
COMP320	Cold Type Mark-up
COMP330	Typography I
COMP340	Typography II
COMP350	Computer Peripherals and Typesetting
EST300	Graphic Arts Estimating (Semester 5)
ENG301	Technical Report Writing
TRP301	Technical Report Writing
ELECT002	Elective—Technical (Semester 5)
ELECT004	Elective—Academic
ELECT003	Elective—Technical (Semester 6)

Option 2—Camera/Stripping

CAM300	Photomechanical Reproduction
CAM310	Photomechanical Reproduction
CAM320	Photomechanical Reproduction (Gravure)
CAM330	Photomechanical Reproduction (Scanner)
PSP300	Film Imposition/Printing Surface Preparation
PSP310	Film Imposition/Printing Surface Preparation
PSP320	Film Imposition/Printing Surface Preparation
EST300	Graphic Arts Estimating (Semester 5)
ENG301	Technical Report Writing
TRP301	Technical Report Writing
ELECT002	Elective—Technical (Semester 5)
ELECT004	Elective—Academic
ELECT003	Elective—Technical (Semester 6)

Option 3—Machine Printing

LTPR300	Die Cutting and Embossing
FLEX300	Machine Printing Flexography
ROTO300	Machine Printing Rotogravure
LITH310	Machine Printing Offset
LITH320	Machine Printing Offset
LITH330	Machine Printing Web Offset
EST300	Graphic Arts Estimating (Semester 5)
ENG301	Technical Report Writing
TRP301	Technical Report Writing
ELECT002	Elective—Technical (Semester 5)
ELECT004	Elective—Academic
ELECT003	Elective—Technical (Semester 6)

Option 4—Binding and Finishing

BIND300	Binding and Finishing
BIND310	Binding and Finishing
BIND320	Binding and Finishing
BIND330	Binding and Finishing
BIND340	Binding and Finishing
BIND350	Binding and Finishing
EST300	Graphic Arts Estimating (Semester 5)
ENG301	Technical Report Writing
TRP301	Technical Report Writing
ELECT002	Elective—Technical (Semester 5)
ELECT004	Elective—Academic
ELECT003	Elective—Technical (Semester 6)

OFFSET PRINTING

GBC Code G542 **Starting:** September
St. James Campus **Certification:** Certificate
40 Weeks

PREREQUISITES: Ontario Grade 10 or equivalent. All applicants must be interviewed and take basic skill tests.

ABOUT THE PROGRAM: This short technical program is designed to train a person in the operation of various types of small offset and letterpress presses likely to be encountered in captive plants or small printing shops. Instruction will also be given in pre-press operation which will include: typesetting, paste-up, basic camera (line and half tone reproduction), printing surface preparation (stripping and platemaking). To assist the student to be more beneficial to the employer, some binding and finishing operations will be taught. All subjects are taught on a block system. Technical time is divided—50% offset press, 25% camera and stripping, 25% copy preparation, letterpress and bindery.

CAREER PROSPECTS: Successful students of the Offset Printing Program are prepared to meet the job requirements of the industry. Graduates obtain positions in instant printing shops, in-house printing departments, and small commercial printing companies.

COURSES:

40 WEEKS

COMP530	Copy Preparation HM Comp Paper Assembly
CAM534	Process Camera Operation
PSP536	Stripping and Platemaking
LTPR538	Machine Printing Letterpress
LITH540	Machine Printing Offset
BIND542	Binding and Finishing
QC501	Quality Control

Screen Process Printing

GBC Code G540 **Starting:** September
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Grade 10 or equivalent. All applicants must be interviewed and pass a basic skill test.

ABOUT THE PROGRAM: Screen printing is a rapidly growing segment of the specialized printing industry. Surfaces such as plastic, glass, metal, fabric, wood and paper in areas such as textiles, wallpapers, signs, advertising posters and printed circuits are all printed by this method. Students with artistic and mechanical aptitude do particularly well at this work. All subjects are taught in a modular system. Students are trained to meet the requirements of industry.

CAREER PROSPECTS: Graduates of the program obtain positions as camera operators, stencil cutters, layout persons, ink formulators, press operators and finishers. Some graduates have obtained positions at the management level.

COURSES:

SEMESTER 1	20 WEEKS
SP526	Basic Principles of Layout, Design, Typography
SP528	Basic Film Imposition
SP529	Basic Manual and Mechanized Screen Printing

SEMESTER 2	20 WEEKS
SP527	Photomechanical Reproduction
SP531	Advanced Film Imposition
SP532	Intermediate Manual and Mechanized Screen Printing
SP530	Advanced Mechanized Screen Printing

Computer Typesetting

GBC Code G547 **Starting:** August
St. James Campus **Certification:** Certificate
40 Weeks

PREREQUISITES: Grade 12 Ontario Secondary School Graduation Diploma with credits in mathematics and English or equivalent, or acceptable equivalency derived from industrial experience.

All applicants must be interviewed by the College and, in cases where academic standing is not certified, take a functional level test.

ABOUT THE PROGRAM: This short technical program is designed to train persons in the operation and concepts of high technology typesetting to an acceptable level of production, working in both French and English; and second, to provide candidates with the ability to adapt to changes in technology. Students are expected to reach a typing speed of 40 wpm, which is achieved via a Lumisonic typing course.

The program is further intended to retrain existing industry personnel whose skills have become obsolete, or who may benefit by learning new technology.

Skills acquired will include the production of input mediums containing coding to produce aesthetically pleasing typeset material; copy editing via VDT; reconfiguration of equipment to enable new keyboard layouts, new outputs, translation of coding, French. Eighty per cent of this program is hands-on.

CAREER PROSPECTS: On completion of this program, it is expected that employment may be found in a number of facilities: trade typesetting companies that supply typesetting to printing companies; large corporations that have printing or graphics departments; advertising agencies; instant printers; translation bureaus; graphics and printing departments of food chains, mail order houses, department stores. The occasional opportunity occurs in the typographic design and slide presentation fields.

COURSES:

40 WEEKS	
COMP500	Introduction to Computer Typesetting
COMP501	Paper and Film Assembly (Paste-up)
COMP502	Phototypesetting Keyboard/ Operation Concepts
COMP503	Photocomposition Tape Input
COMP504	Advanced Keyboard Techniques
COMP505	Cold Type Mark-up
COMP506	Typography I
COMP516	Typography II
COMP507	Computer Peripherals and Typesetting
COMP508	Typesetting in French
EST500	Computer Assisted Estimating for Typesetting
TYP547	Typing
WORD500	Basic Machine Operations

SIGNWRITING

GBC Code G546 **Starting:** September
St. James Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Grade 10 or equivalent, or related experience, plus a portfolio, aptitude test and interview.

ABOUT THE PROGRAM: The program is designed to train the student in the basic skills and knowledge necessary to be able to work in the sign industry. The students will study type faces suitable for sign work. They will practice lettering for show card, banner, plywood and metal signs.

Various materials, paints, tools not used in the sign industry will be studied; materials will be prepared and/or reclaimed for the various projects.

The student will be introduced to the theory and practice of screen printing as it relates to the sign industry.

Basic layout ideas and colour theory and practice will be studied and developed into more complicated designs suitable for signs. The emphasis throughout the program will be on producing quality work.

COURSES:

SEMESTER 1	20 WEEKS
SIGN530	Basic Signwriting
SIGN531	Basic Show Card Writing and Pen Lettering
SIGN532	Introduction to Layout and Colour

SEMESTER 2	20 WEEKS
SIGN533	Signwriting
SIGN534	Show Card Writing and Pen Lettering
SIGN535	Design and Layout
SIGN536	Colour
SIGN540	Posters

Choose 1 of the following 4 electives (Optional elective at instructor's discretion to total of one hour per week.)

SIGN537	Screen Process Printing (Signs and Cards)
SIGN538	Introduction to Gold Leaf
SIGN539	Introduction to Plastic Signs
SIGN541	Signwriting Special (Work Experience)

HEALTH SCIENCES

Diploma Nursing

GBC Code NU102 **Starting:** January and September
St. James Campus **Certification:** Diploma
5 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in two of physics, chemistry and biology at, or above, the general level. Applicants with less than a general level mark of 65 or an advanced level mark of 60 in two sciences will be tested in English, mathematics and basic sciences. Applicants may be interviewed.

ABOUT THE PROGRAM: The aim of this program is to prepare Diploma Nurses to practice nursing in Ontario and to write the Ontario Nurse Registration Examinations.

It extends over two years plus one semester and consists of 40 weeks of classes and clinical experience in year I and 40 weeks in year II followed by 16 weeks pre-graduate experience in hospitals. The curriculum combines both nursing and general education courses. In the second year, there is one elective; students may choose one of several sociology courses.

CAREER PROSPECTS: Graduates of the program who are sucessful in the Ontario Nurse Registration Examinations are likely to find employment in acute care hospitals, convalescent hospitals, rehabilitation agencies, public health agencies, visiting nurses associations, retirement homes and nursing homes.

COURSES:

SEMESTER 1 16 WEEKS

NURS101	Nursing Level I
NURS102	Nursing I (Lab-Theory)
PATH101	Pathophysiology & Therapeutic Interventions A
COMM105	Communications
PSY111	Introductory Psychology
BIO101	Biological Sciences "A"

SEMESTER 2 16 WEEKS

NURS103	Nursing Level II
NURS104	Nursing II (Lab-Theory)
PATH101	Pathophysiology & Therapeutic Interventions "A"
BIO101	Biological Sciences "A"
HUMN101	Humanities "A"

SEMESTER 3 16 WEEKS

NURS105	Nursing Level III
NURS106	Nursing III (Lab-Theory)
PATH101	Pathophysiology & Therapeutic Interventions "A"
HUMN101	Humanities "A"
SOC101	Sociology
PSY112	Developmental Psychology

SEMESTER 4 32 WEEKS

In semester four, a student will take 14 courses in total: three pathology, one biology, one humanities, one sociology and eight nursing courses before proceeding to semester five.

Rotation 1 (Medical—Surgical)

NURS203	Medical—Surgical Nursing of Adults
NURS204	Medical—Surgical Nursing Adults (Lab-Theory)
PATH201	Pathophysiology & Therapeutic Interventions "B"
ELECT000	Elective

Rotation 2 (Paediatrics)

NURS205	Medical—Surgical Nursing of Children
NURS206	Medical—Surgical Nursing Children (Lab-Theory)
PATH202	Pathophysiology & Therapeutic Interventions "C"
ELECT000	Elective

Rotation 3 (Maternal—Newborn)

NURS201	Maternity and Newborn Nursing
NURS202	Maternity and Newborn Nursing (Lab-Theory)
BIO201	Biological Sciences "B"
HUMN201	Humanities "B"

Rotation 4 (Psychiatry)

NURS207	Psychiatric Nursing
NURS208	Psychiatric Nursing (Lab-Theory)
PATH205	Psychopathology & Therapeutic Interventions
HUMN201	Humanities "B"

Choose 1 of the following 3 electives

SOC201	Interpersonal Relations
SOC202	Living with Dying
SOC204	Sociology of Women

SEMESTER 5 16 WEEKS

NURS209	Nursing Level V
NURS210	Nursing Level V (Lab-Theory)

Registered Nurse–Critical Care

GBC Code NU400 **Starting:** February and September
Nightingale Campus **Certification:** Certificate
19 Weeks

PREREQUISITES: Current Certificate of Competence, College of Nurses of Ontario or, if from out of province, eligibility for registration in Ontario; current nursing experience in an active treatment centre; Basic Rescuer Certificate, Canadian Heart Foundation.

ABOUT THE PROGRAM: The goal of this program is to prepare registered nurses to give competent care to critically ill individuals and their families.

The program is organized in two phases, each consisting of a theory and a critical component. In Phase I, the focus is on learning core concepts of critical care nursing through a study of the stable, critically ill individual. In Phase II, a case study format is used to build upon the core concepts and focus upon the unstable, critically ill individual suffering from complex, multisystem problems.

Theory includes:

- advanced anatomy and physiology of the vital systems (i.e.) cardiovascular, respiratory, renal, nervous and endocrine
- pathology of selected diseases including medical assessment and management
- nurse's role re selected assessment and supportive measures (e.g.) electrocardiogram, hemodynamic monitoring, venipuncture, intracranial pressure monitoring, ventilators
- systematic nursing assessment of all body systems
- use of nursing process in the critical care setting
- relevant medical-moral issues
- legal aspects of critical care nursing
- ways to promote communication, group process, prevent stress and burn-out.

Clinical practice is arranged in one of the downtown Toronto hospitals.

Theory portions of this program may be completed on a part-time basis.

19 WEEKS	
CCN400	Critical Care Nursing–Theory and Lab–General
HUMN402	Nursing Issues and Values
CCN401	Critical Care–Pathotherapeutics
CCN402	Critical Care Nursing–Practicum–General
CCN403	Critical Care Nursing–Theory–Advanced
CCN404	Critical Care Nursing–Practicum–Advanced

Registered Nurse–Neonatal Intensive Care

GBC Code NU405 **Starting:** September and February
Nightingale Campus **Certification:** Certificate
15 Weeks

PREREQUISITES: Current Certificate of Competence, College of Nurses of Ontario, or, if from out of province, eligibility for registration in Ontario; current nursing experience in the field of perinatology, i.e. obstetrics, nursery, N.I.C.U.; Basic Rescuer Certificate, Canadian Heart Foundation.

ABOUT THE PROGRAM: This program prepares the registered nurse to provide comprehensive care to critically ill newborns in an intensive care setting and to their families.

Theory includes:

- current concepts of perinatal nursing and high risk pregnancy
- neonatal physiology, including indepth embryology
- problems of the premature and low birth weight infant and the follow up care provided
- care required prior to and during transportation of the newborn
- intervention available to critically ill infants with specific neonatal problems (genetic, congenital, respiratory)
- emotional care to the family of the high risk newborn and to the health care provider

Practicum includes:

- participant observation in high risk labour and delivery and antepartum units
- total care of the critically ill newborn including assisted ventilatory care
- use of advanced monitoring and diagnostic equipment
- operating room observation with pre and post op care
- blood sampling and intravenous insertion experience
- participation with the transport team
- laboratory and x-ray interpretation
- care of the family of the critically ill infant

Clinical practice with critically ill neonates is given in the Neonatal Intensive Care Unit at The Hospital for Sick Children.

COURSES:

15 WEEKS	
NEO402	High Risk Pregnancy–Theory
NEO403	High Risk Pregnancy–Practice
NEO404	Neonatal Physiology–Theory
NEO405	Neonatal Physiology–Practice
NEO406	Low Birth Weight Infant–Theory
NEO407	Low Birth Weight Infant
NEO408	Neonatal Problems–Theory
NEO409	Neonatal Problems–Practice
NEO410	Neonatal Respiratory Conditions–Theory
NEO411	Neonatal Respiratory Conditions–Practice

Registered Nurse—Operating Room

GBC Code NU401 **Starting:** September and February
Nightingale Campus **Certification:** Special Certificate
19 Weeks

PREREQUISITES: Current Certificate of Competence, College of Nurses of Ontario, or, if from out-of-province, eligibility for registration in Ontario; current nursing experience in an active treatment centre; Basic Rescuer Certificate, Canadian Heart Foundation.

ABOUT THE PROGRAM: The goal of this program is to prepare registered nurses to function competently as team members in an operating room.

The program is organized in three phases. Phase I consists of six weeks of theory including:

- Relevant Anatomy and Physiology
- Principles of asepsis
- Duties of scrub and circulating nurses
- Intensive Study of Surgical Interventions, their indication(s) and complication(s)

Phase II is a ten-week practicum. During this time, the student rotates through several services, i.e. General Surgery, Gynecology, Urology, E.N.T., Orthopaedics, Plastics, Ophthalmology and has observational experiences in Neurosurgery and Cardiovascular surgery.

Hospitals participating in the clinical practice include:

- St. Michael's Hospital
- The Hospital for Sick Children
- Mount Sinai Hospital

Phase III is three weeks in length. The focus is management of organization behaviour to prepare nurses to function as first level supervisors. The content includes management theory based on a behavioural human-relations framework.

COURSES:

19 WEEKS	
ORN400	Operating Room Nursing—Theory and Labs
ORN401	Operating Room Nursing—Practicum
ORN402	ORN—Organization and Management
HUMN402	Nursing Issues and Values

Refresher for the Registered Nurse/ Upgrading for the Graduate Nurse

GBC Code NU402 **Starting:** September, January and April
Nightingale Campus
5 Semesters

PREREQUISITES: Current Certificate of Competence, College of Nurses of Ontario or letter of ruling from College of Nurses re: requirements to register in Ontario.

ABOUT THE PROGRAM: This full-time program is designed to meet the needs of nurses either to refresh before returning to active practice or to upgrade prior to writing Ontario nurse registration examinations. It is of special interest to nurses who:

- are currently registered in Ontario but who wish some refreshment before returning to active practice
- have graduated outside Ontario and require (an) additional course(s) to become eligible to write registration examinations
- wish to review one or more area before writing registration examinations
- have failed the registration examinations and wish additional preparation before re-writing.

The core course, "Review of Basics to Nursing," consists of theory to update selected knowledge and skills and so forms a basis for ongoing study in the options. The four (4) options, (i.e.) Maternity Nursing, Medical-Surgical Nursing, Pediatric Nursing and Psychiatric Nursing, provide theory with relevent clinical practice in one of the downtown Toronto hospitals. Following completion of the core course, the student may select one or more of the options based on individual need(s) and/or interests.

CAREER PROSPECTS: Registered nurses who take courses of the program for refreshment purposes are likely to find employment in acute care hospitals, specialty hospitals, extended care hospitals, convalescent hospitals, rehabilitation agencies, public health agencies, retirement homes and nursing homes. Non-registered nurses who complete courses for upgrading purposes as set out in their letter of ruling are eligible to write Ontario Nurse Registration Examinations and, if successful, work as registered nurses as above.

OPTIONS: Review of Basics to Nursing, Medical/Surgical Nursing, Pediatric Nursing, Maternity Nursing, Psychiatric Nursing

COURSES:

SEMESTER 1	6 WEEKS
Option 1—Review of Basics to Nursing	
RBN400	Review of Basics to Nursing

SEMESTER 3	7 WEEKS
Option 3—Pediatric Nursing	
PEDN401	Pediatric Nursing—Practical
PEDN402	Pediatric Nursing—Theory

SEMESTER 5	7 WEEKS
Option 5—Psychiatric Nursing	
PSYN401	Psychiatric Nursing—Practical
PSYN402	Psychiatric Nursing—Theory

SEMESTER 2	7 WEEKS
Option 2—Medical-Surgical Nursing	
MSN401	Medical-Surgical Nursing—Practical
MSN402	Medical-Surgical Nursing—Theory

SEMESTER 4	7 WEEKS
Option 4—Maternity Nursing	
MATN401	Maternity Nursing—Practical
MATN402	Maternity Nursing—Theory

CHIROPODY

GBC Code DE113 **Starting:** September
Nightingale Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in physics, chemistry and biology in Grades 11 and 12 at, or above, the general level. Applicants will be tested in basic sciences and have a manual dexterity test.

ABOUT THE PROGRAM: This program was initiated by the government of Ontario in response to a pressing need to improve foot care services for the people of the province. It is the first Chiropody program in North America.

This program educates individuals to become highly skilled professional chiropodists. It provides students with a sound knowledge of scientific principles and allows for progressive application of this knowledge in the chiropodial practice.

Students put their learning into practice; a comprehensive clinical experience in a hospital setting is part of the program.

CAREER PROSPECTS: The graduates of the chiropody program will function as employees in institutional settings and will be members of a health care team.

COURSES:

SEMESTER 1	15 WEEKS
CHIR100	Introduction to Chiropody
BIO105	Biological Science
HIST103	Histology
BIO109	Anatomy and Physiology of the Lower Extremities
PSY170	Introductory Psychology
ENG141	Language and Communications I
POD104	Podology I
ORTH102	Orthotics I
CHIR101	Fundamental Principals (to Clinical Skills)
CLIN100	Pre-Clinical Skills

SEMESTER 2	19 WEEKS
BIO105	Biological Science
BIO109	Anatomy and Physiology of the Lower Extremities
BIO112	Microbiology
ENG192	Language and Communications II
HUMN103	Ethics for the Health Sciences
POD114	Podology II
ORTH122	Orthotics II
CLIN101	Clinical Skills (Fundamental Principles)

SEMESTER 3	8 WEEKS
PATH107	Pathophysiology and Therapeutics A
PATH108	Pathophysiology and Therapeutics B
MED118	Emergency Care
BIO113	Biomechanics I
POD124	Podology III
CLIN102	Clinical Skills

SEMESTER 4	15 WEEKS
PATH206	Pathology II
ELS202	Society and Health Care
COMM201	Communications and Health Care
BIO213	Biomechanics II
POD204	Podology IV
CLIN200	Clinical Skills

SEMESTER 5	19 WEEKS
ORTH200	Applied Orthopaedics and Vascular Surgery
DERM200	Dermatology
PED200	Pediatric Podology
GER200	Gerontology
LAW212	Public Health and Jurisprudence
BIO223	Biomechanics III
CLIN201	Clinical Skills

SEMESTER 6	8 WEEKS
CLIN202	Clinical Skills

ORTHOTIC/PROSTHETIC TECHNICIAN

GBC Code DE110 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in physics and biology in Grades 11 and 12, at or above the general level.

Mature applicants (less than Grade 12) will be tested in English and basic sciences.

Qualified applicants will have a manual dexterity test.

Applicants will be assigned a status of accept, reject or wait list. If there are more qualified applicants than seats available, applicants will be chosen for acceptance by random selection.

ABOUT THE PROGRAM: This two-year technical program is for people who are craft-oriented but not interested in the clinical aspect of orthotics/prosthetics. The student learns, under the direction of the Orthotist/Prosthetist, how to make orthoses and protsheses which are fitted to help rehabilitate disabled patients. It is a field in which new materials, techniques and controls are creating an increasing demand for technically competent people.

Successful graduates will be eligible for registration by the Canadian Association of Prosthetists and Orthotists.

CAREER PROSPECTS: Excellent employment opportunities are available in hospitals, rehabilitation centres and private facilities across the country.

JOB DESCRIPTIONS:

Orthotic Technician—The Orthotic Technician makes orthoses from drawings, measurements and plaster casts using a variety of materials, such as metals, plastics, leathers and fabrics.

Prosthetic Technician—The Prosthetic Technician makes prostheses from drawings, measurements and plaster casts using a variety of materials, such as metals, plasters and leathers.

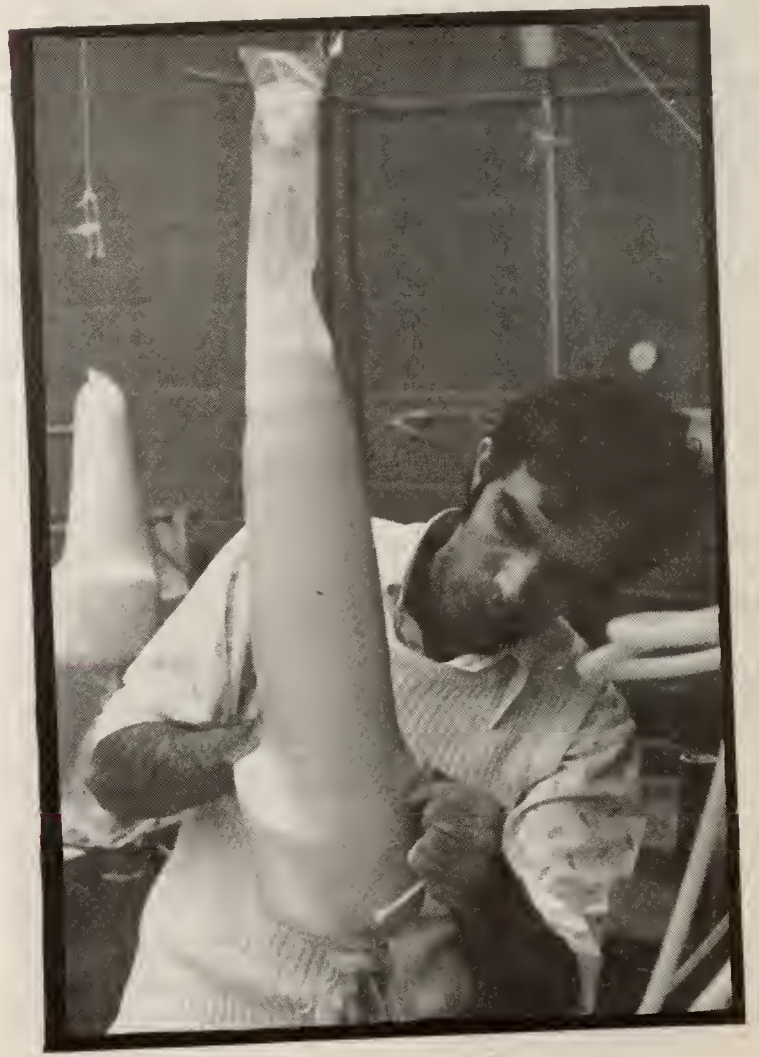
COURSES:

SEMESTER 1	15 WEEKS
PROS101	Materials and Laboratory Techniques
ENDR114	Drawing and Sketching (Basic)
WELD147	Welding Techniques
ANAT104	Gross Anatomy
MATH104	Mathematics
MECH104	Mechanics
ENG141	Language and Communications I
HR100	Human Relations

SEMESTER 2	19 WEEKS
PROS101	Materials and Laboratory Techniques
MACH100	Basic Machine Shop Fundamentals
MET101	Introductory Metallurgy
ANAT104	Gross Anatomy
MATH104	Mathematics
MECH104	Mechanics
ENG192	Language and Communications I
HR100	Human Relations

SEMESTER 3	15 WEEKS
PROS201	Materials and Lab Techniques
ELTC130	Electronics
MECH114	Mechanics of Materials
PL225	Applied Plastics
ENG205	Language and Communications
HR200	Human Relations

SEMESTER 4	19 WEEKS
PROS201	Materials and Lab Techniques
ELTC130	Electronics
MECH114	Mechanics of Materials
PL225	Applied Plastics
ENG205	Language and Communications
HR200	Human Relations
PROS203	Field Training



Clinical Methods In Orthotics/Prosthetics

GBC Code DE112 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: This is a post-diploma program. Graduates from the Orthotics/Prosthetics technical program, graduates in kinesiology, physiotherapy, physical education and nursing will be considered as suitable applicants. Qualified applicants will be interviewed.

ABOUT THE PROGRAM: The two-year Clinical Orthotist/Prosthetist Program is coordinated between George Brown College and West Park Hospital, with associate clinics at Chedoke McMaster Hospital and the Ontario Crippled Children's Centre. Students will be trained in making and fitting artificial limbs and braces.

Students obtain clinical experience under the direction of Orthopaedic Surgeons and certified Prosthetists/Orthotists. Laboratory experience is gained at the College.

This program will appeal to students, especially those who have a background in health sciences, who are interested in working with people and helping patients in their attempts to overcome disabilities.

Successful graduates will be eligible for certification by the Canadian Board for Certification of Prosthetists and Orthotists.

CAREER PROSPECTS: Employment is available in hospitals, rehabilitation centres and private facilities throughout Canada.

COURSES:

SEMESTER 1 15 WEEKS

CT100	Clinical Techniques
LAB101	Laboratory Procedures
ENDR115	Drawing, Sketching and Design (Basic)
ANAT107	Gross Anatomy
BIO103	Microbiology
PHYS100	Physiology
ENG215	Language and Communications
SOC110	Sociology of Patient Relations

SEMESTER 2 19 WEEKS

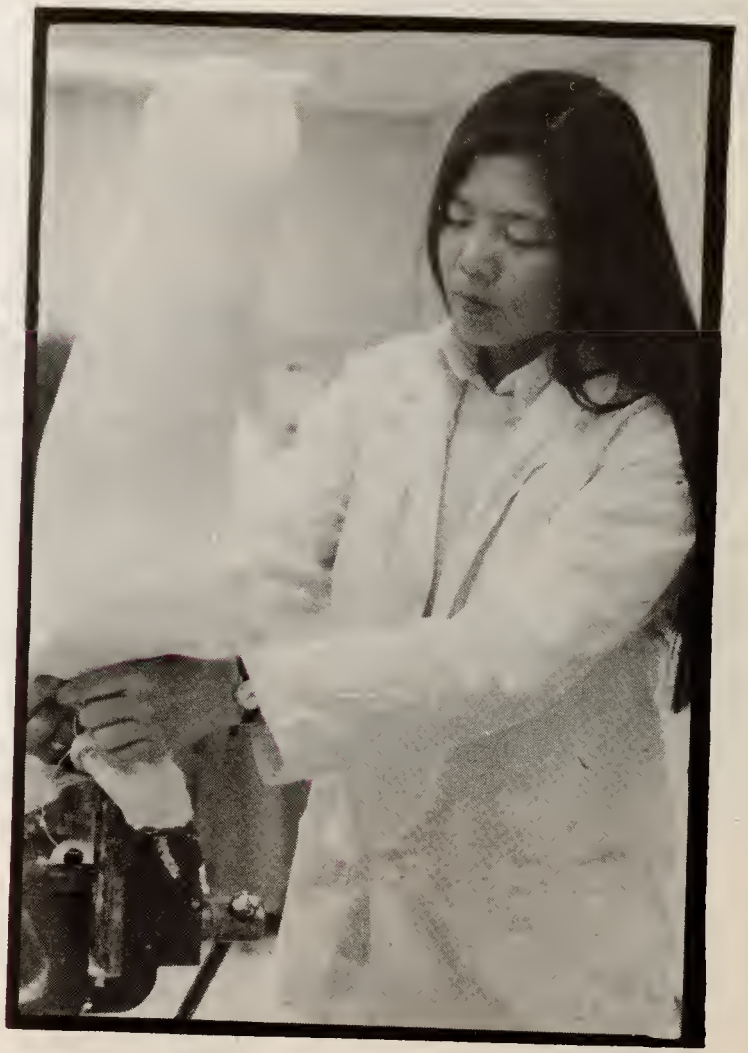
CT100	Clinical Techniques
KINE200	Kinesiology and Biomechanics
LAB101	Laboratory Procedures
ANAT107	Gross Anatomy
PHYS100	Physiology
ENG215	Language and Communications
SOC110	Sociology of Patient Relations

SEMESTER 3 15 WEEKS

CT200	Clinical Techniques
KINE200	Kinesiology and Biomechanics
LAB201	Laboratory Procedures
BIO203	Bioelectronics
PATH204	Pathophysiology

SEMESTER 4 19 WEEKS

CT200	Clinical Techniques
LAB201	Laboratory Procedures
PROJ202	Research Project
BIO203	Bioelectronics
PATH204	Pathophysiology
BUS109	Business Management, Ethics and Jurisprudence



FITNESS INSTRUCTOR

GBC Code PE140 **Starting:** September
Casa Loma Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in mathematics, chemistry and biology in years 3 and 4 at, or above, the general level or equivalent. Qualified applicants will attend a compulsory orientation session.

BACKGROUND: Credits in chemistry and/or biology at the senior level are desirable.

ABOUT THE PROGRAM: The Fitness Instructor Program is concerned with preparing professionals to meet the multi-faceted demands of a growing industry.

Basically, fitness instructors will provide inter-personal services which call upon unique motivational, technical and organizational skills. The wide diversity of practical skills of well-trained fitness instructors are being recognized by the market and valued as a key component to establish good relations with the clientele while providing safe and effective fitness guidance.

During the program's first year, students learn kinesiology and physiology with application to exercise techniques, exercise class leadership and fitness assessment.

In the second year, students further develop skills in exercise class leadership and fitness assessment. Students learn to design individual exercise programs. They are involved in operating a staff fitness program including workshops and special events. Students operate a College Fitness Centre where they do fitness testing, program demonstrations, nutrition counselling and club supervision. In the final semester, students do field work in a fitness setting of their choice.

CAREER PROSPECTS: Many past graduates have found employment at a variety of fitness centres, racquet clubs and YM/YWCA performing such services as fitness testing; exercise class leadership; individual program design; program demonstration; lifestyle and nutrition counselling; general management assistance; and other duties associated with the operation of a small service business.

Some specialized requests for our fitness instructors have come for an ECG lab technician; boy's club physical instructor; employee fitness staff; private physician's assistant and other positions which are self generated.

COURSES:

SEMESTER 1	15 WEEKS
ANAT108	Kinesiology I
FIT105	Introduction to Fitness Testing I
FIT107	Applied Exercise Techniques I
HEAL102	First Aid
NUT104	Nutrition I
PHYS105	Muscle Physiology
BIOI10	Biology for Fitness
ENG141	Language and Communications I
HRI00	Human Relations

SEMESTER 2	19 WEEKS
ANAT109	Kinesiology II
FIT106	Introduction To Fitness Testing II
FIT108	Applied Exercise Techniques II
FIT109	Introduction to Exercise Class Leadership
FIT110	Fitness Testing Clinic
HEAL101	Prevention and Treatment of Injuries
NUT105	Nutrition II
PHYS106	Physiology of Exercise
PATH109	Pathology
ENG192	Language and Communications II
HRI00	Human Relations

SEMESTER 3	15 WEEKS
ADM201	Exercise Class Leadership
ADM203	Fitness Management Projects
FIT200	Advanced Fitness Testing
FIT202	Guidelines to Exercise Programming
FIT205	ECG Monitoring Techniques
FIT206	Fitness Club (Clinical) Experience
NUT201	Nutrition Counselling (Special Cases)
HR205	Fitness Counselling

SEMESTER 4	19 WEEKS
ADM201	Exercise Class Leadership
ADM203	Fitness Management Projects
FIT200	Advanced Fitness Testing
FIT202	Guidelines to Exercise Programming
FIT204	Racquet Sports Skills
FIT206	Fitness Club (Clinical) Experience
NUT201	Nutrition Counselling (Special Cases)
PROJ205	Co-Op Training in Fitness Field

DENTAL TECHNOLOGY

GBC Code DE102 **Starting:** September
Casa Loma Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in chemistry, physics and biology in Grades 11 or 12, at or above the general level.

Mature applicants (less than Grade 12) will be tested in English and the basic sciences.

Qualified applicants will have a manual dexterity test and other suitability to the program. Candidates will be required to attend a mandatory orientation session.

Applicants will be assigned a status of accept, reject or wait list.

ABOUT THE PROGRAM: The Dental Technician makes a major contribution to the practice of dentistry. This dental worker fabricates all the various appliances used by the dentist in the treatment of patients.

The program at George Brown is the only one of its kind in this province. The teaching program is highly project-oriented and there is a low student-instructor ratio which allows for much individual instruction throughout the program.

The Dental Technician fabricates from a dentist's prescription, orthodontic appliances, full dentures, partial dentures, crowns and bridges. The technician may also produce specialty items such as surgical splints and sports mouth guards.

CAREER PROSPECTS: The Dental Technician can choose to be employed by a commercial dental laboratory, a dentist, or enter the Armed Forces with an advanced rank. She/he may also become a Registered Dental Technician and open and operate a dental laboratory.

COURSES:

SEMESTER 1	15 WEEKS
ANAT103	Dental Anatomy
DENT110	Dental Materials
LAB100	Dental Laboratory and Lecture
BIO107	Biology
CHEM107	Chemistry and Science of Dental Material
ENG141	Language and Communications I
HR100	Human Relations

SEMESTER 2	19 WEEKS
ANAT103	Dental Anatomy
LAB100	Dental Laboratory and Lecture
BIO107	Biology
PHY107	Biophysics
ENG192	Language and Communications II
HR100	Human Relations

SEMESTER 3	15 WEEKS
DENT201	Occlusion
LAB200	Dental Laboratory and Lecture
MET200	Metallurgy
HR200	Human Relations
SBM100	Small Business Management

SEMESTER 4	19 WEEKS
DENT201	Occlusion
LAB200	Dental Laboratory and Lecture
MET200	Metallurgy
PSY214	Psychology
SBM100	Small Business Management

SEMESTER 5	15 WEEKS
LAB300	Dental Laboratory and Lecture
ELS300	Language and Communications
HR200	Human Relations
PSY300	Psychology

SEMESTER 6	19 WEEKS
LAB300	Dental Laboratory and Lecture
ELS300	Language and Communications
PSY300	Psychology

DENTURE THERAPY

GBC Code DE106 **Starting:** September
Casa Loma Campus **Certification:** Diploma
5 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in chemistry, physics and biology in Grades 11 or 12, at or above the general level.

Mature applicants (less than Grade 12) will be tested in English and basic sciences.

Qualified applicants will have a manual dexterity test. Candidates will be required to attend a compulsory orientation session.

Applicants will be assigned a status of accept, reject or wait list.

ABOUT THE PROGRAM: Students are trained in the technical and clinical areas required to fabricate and insert dentures. Other subjects studied include biological sciences and social services.

In private practice, the therapist is restricted to the making of complete upper or lower dentures and may reline or repair complete dentures only. The denture therapist may work, under supervision, in the construction of complete or partial dentures and relining or repairing dentures.

CAREER PROSPECTS: Denture therapists may choose to practice in a team with other dental health workers or establish a private practice.

COURSES:

SEMESTER 1	15 WEEKS
ANAT103	Dental Anatomy
DENT111	Dental Materials
DTC100	Denture Therapy—Pre-Clinical
BIO102	Human Biology
BIO104	Microbiology
ENG141	Language and Communications I
HR100	Human Relations

SEMESTER 2	19 WEEKS
ANAT103	Dental Anatomy
DENT111	Dental Materials
DTC100	Denture Therapy—Pre-Clinical
BIO102	Human Biology
PHAR102	Pharmacology and Emergency Care
ENG192	Language and Communications II
HR100	Human Relations

SEMESTER 3	15 WEEKS
DTC200	Denture Therapy—Clinical
DTC201	Denture Therapy—Laboratory
HIST100	Dental Histology and Embryology
PATH110	Pathophysiology A (Intro. Pathology)
PATH111	Pathophysiology B (Oral Medicine and Assessment)
PROS204	Prosthodontics
ANAT204	Anatomy—Head and Neck
HR200	Human Relations
SBM100	Small Business Management

SEMESTER 4	19 WEEKS
DTC200	Denture Therapy—Clinical
HIST101	General Histology
ANAT204	Anatomy—Head and Neck
ENG200	Language and Communications
SMB100	Small Business Management
PATH210	Pathophysiology C (Oral Pathology)

SEMESTER 5	20 WEEKS
DENT316	Community Dentistry
DTC300	Denture Therapy—Clinical
NUT300	Nutrition and Diet
TECH300	Technical Essay
PSY301	Psychology

DENTAL HYGIENE

GBC Code DE442 **Starting:** September
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Applicants must be certified or eligible for certification as a Dental Assistant in Ontario and present proof of a minimum of 8 consecutive months of employment as a dental assistant. Candidates will be required to attend a complusory orientation session and write a standard test on dental science knowledge.

ABOUT THE PROGRAM: The Dental Hygienist is trained to work with the patient under the general supervision of a dentist. Services provided to the patient are of a preventive nature.

Students learn to scale and polish teeth, polish amalgam fillings, take x-rays, apply periodontal dressings, take impressions for study models, place rubber dams, apply fissure sealants and anti-cariogenic agents, remove sutures, and place and remove orthodontic arch wires, bands and brackets. The hygienist may be involved in dietary counselling in relation to dental disease and dental health education.

Graduates of this program are required to complete a provincial licensing examination.

CAREER PROSPECTS: Graduates may expect employment in private practice, public health and hospitals.

COURSES:

SEMESTER 1	15 WEEKS
DENT217	Community Dentistry
HIST101	General Histology
NUT202	Nutrition
PAED100	Paedodontics
PATH110	Pathophysiology A (Introductory Pathology)
PATH111	Pathophysiology B (Oral Medicine and Assessment)
PATH112	Pathophysiology D (Oral Pathology and Preventive Dentistry II)
PCT201	Pre-Clinical Techniques
PERI100	Periodontics I
ANAT204	Anatomy—Head and Neck
ENG141	Language and Communications I
PSY200	Social Psychology

SEMESTER 2	21 WEEKS
DENT206	Dental Health Education
DENT209	Advanced Radiography
HIST100	Dental Histology and Embryology
NUT203	Nutrition Counselling
ORTH100	Orthodontics
PCT203	Clinical Techniques
PERI101	Periodontics II
ANAT204	Anatomy—Head and Neck
ENG202	Language and Communications II
PSY200	Social Psychology
FLDP200	Field Practice
PATH112	Pathophysiology D (Oral Pathology and Preventive Dentistry II)

DENTAL HYGIENE—EXPANDED DUTIES

GBC Code DE400 **Starting:** September
Casa Loma Campus **Certification:** Certificate
16 Weeks

PREREQUISITES: Ontario Licensure as a Dental Hygienist with a minimum of one year work experience.

Applicants will have a manual dexterity and dental anatomy test and may be interviewed.

ABOUT THE PROGRAM: The expanded duty dental hygienist performs restorative procedures in addition to traditional preventive duties.

The expanded duty hygienist, under the general supervision of a dentist, places and finishes amalgam, silicate, resin and temporary restorations and cements temporary crowns.

Students practice various procedures on a manikin, after which they spend eight weeks in a clinical setting performing restorative procedures on patients.

Graduates write a provincial licensing examination.

CAREER PROSPECTS: Graduates may expect employment in private practice, public health and hospitals.

COURSES:

	16 WEEKS
DENT400	Science of Dental Materials
HIST400	Advanced Dental Histology and Embryology
PCT401	Pre-Clinical Restorative Techniques
PCT402	Clinical Techniques

DENTAL ASSISTANT

GBC Code DE141 **Starting:** September
Casa Loma Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in biology and chemistry in years 3 and 4 at, or above, the general level, or equivalent. In addition, candidates must provide proof of typing at 30 words per minute, and may attend a selections interview and undertake an aptitude test and other compulsory orientation sessions.

ABOUT THE PROGRAM: The student receives instruction in oro-facial anatomy, human biology, microbiology, preventive dentistry, nutrition, and many other related areas to prepare for various clinical duties.

The Dental Assistant gives chairside assistance to the operator and is qualified to take and process dental x-rays. Other duties include management of the patient and business office records, sterilization procedures and preparation of a variety of dental materials. The assistant may also become involved in oral hygiene instruction.

CAREER PROSPECTS: Upon graduation, the candidate may apply for certification with the Onatario Dental Nurses and Assistants Association. Graduates may expect employment in private practice, public health and hospitals.

COURSES:

SEMESTER 1	15 WEEKS
ANAT102	Oro-Facial Anatomy
DENT106	Dental Materials I
DENT109	Pre-Clinical Dental Radiography
PCT101	Pre-Clinical Techniques
DENT117	Dental Office Management
BIO102	Human Biology
BIO104	Microbiology
ENG141	Language and Communications I
PSY100	Social Psychology

SEMESTER 2	17 WEEKS
DENT104	Preventive Dentistry
DENT107	Dental Materials II
DENT112	Clinical Dental Radiography
NUT101	Nutrition
PCT102	Clinical Techniques
DENT117	Dental Office Management
BIO102	Human Biology
PHAR102	Pharmacology and Emergency Care
ENG202	Language and Communications II
PSY100	Social Psychology
FLDP100	Field Practice

HOSPITALITY

CULINARY MANAGEMENT

GBC Code F106 **Starting:** September
Kensington Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, or equivalent. Qualified applicants will attend an orientation session.

BACKGROUND: Credits in bookkeeping and business mathematics would be useful.

ABOUT THE PROGRAM: The Culinary Management Program provides training in all aspects of food preparation, cooking and presentation to international standards. Graduates are well versed in kitchen organization and management. Included in the program are two six-week periods of supervised work experience under top Ontario chefs.

Successful candidates complete the in-school portion of the basic and advanced apprentice cook program with the subsequent hours of credit.

After two years of work in the industry, graduates are eligible to write the professional certification examination for the trade of Journeyman Cook.

CAREER PROSPECTS: Career opportunities in the field of professional food preparation are excellent. As changing lifestyles influence more and more people to dine out, the demand for professional chefs grows. Demand has increased by more than 50% in the last three years alone. Graduates find employment in large hotels and food operations as well as in more intimate restaurants and clubs.

JOB DESCRIPTIONS:

Chef de Partie—Reporting directly to the Sous (assistant) Chef. The Chef de Partie is responsible for the operation of a major department (Partie) within a large kitchen organization including the ordering and preparation of food, quality control, cost control and the supervision of staff.

Sous Chef—Reporting directly to the Executive Chef. The Sous Chef is responsible for the day-to-day preparation of food and the supervision of staff for all departments within the kitchen, ensuring that the food prepared meets the standards set by the establishment in quality and cost. The Sous Chef is also fully responsible for the kitchen in the absence of the Executive Chef.

COURSES:

SEMESTER 1	15 WEEKS
DIM101	Dimensions Hospitality
FTC101	Food Theory
FSQ101	Small Quantity Food
FLQ101	Large Quantity Food
BKT101	Bake Theory
BK101	Baking
MT101	Meat Theory
SAN100	Sanitation, Safety and Hygiene
MATH111	Business Mathematics
ENG107	Business Communication
ACC109	Accounting
PUR101	Kitchen Management
MARK203	Marketing I

SEMESTER 2	21 WEEKS
FTC102	Food Theory
FSQ102	Small Quantity Food
FLQ102	Large Quantity Food
BKT102	Bake Theory
BK102	Baking
NUT102	Nutrition
PUR102	Purchasing for Hospitality
FC103	Food Cost Control
EDP105	Elementary Computer Concepts
ACC110	Accounting
CWE101	Work Experience

SEMESTER 3	15 WEEKS
FTC203	Food Theory
FSQ203	Small Quantity Food
FLQ203	Advanced International Cuisine
BKT203	Baking Theory
BK203	Baking
FC204	Food Cost Control
LAW204	Law and Insurance
VIN201	Wines
MARK208	Marketing II
ACCL201	Labour Cost
FFE201	Food Facilities and Blueprint
ACC207	Hospitality Accounting

SEMESTER 4	21 WEEKS
FTC204	Food Theory
FLQ204	Food Preparation Advanced Management
BK204	Baking
PERS202	Personnel
SERV204	Function Organization
FFE202	Food Facilities Design and Layout
MP201	Management Projects
TECH201	Management Techniques
CWE202	Work Experience

Food and Beverage Management

GBC Code F107 **Starting:** September
Kensington Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, or equivalent. Qualified Applicants will attend an orientation session.

BACKGROUND: Credits in bookkeeping and business mathematics would be useful.

ABOUT THE PROGRAM: The food industry is the most rapidly expanding service sector of Canada's economy. In 1984, it offered more than 100,000 new jobs.

Fascinating opportunities exist in restaurants, commercial, social and industrial catering, airline food service, health care facilities, hotels, resorts and fast food operations.

Students graduate with thorough training in practical skills and management techniques, using modern facilities which include fully-equipped bar, food preparation stations and a private, licensed dining lounge.

The latest innovations in food service management are learned with a computerized menu planning system as well as banquet catering, food and beverage control, restaurant accounting, nutrition and personnel management.

The College has co-operative training programs with many of Ontario's top restaurants and catering establishments.

CAREER PROSPECTS: Graduates can look forward to positions in restaurants, institutions and catering companies at the midmanagement level. Many begin their careers as management trainees, spending approximately six months working a variety of positions before promotion to Department Head, Assistant Manager or possibly Manager of a food service operation.

JOB DESCRIPTIONS: *Management Trainee*—The management trainee works in all departments of a restaurant operation from food preparation to accounting, learning all aspects of the business from the administrative point of view.

Manager—The manager is responsible for the complete operation of a restaurant or food service facility, from supervising employees to maintaining excellent customer relations.

Food and Beverage Manager—The food and beverage manager is responsible for one of the most challenging departments within a large food service operation or hotel. The position includes responsibility for training and supervising staff, planning menus, cost control, sanitation, and an excellent food production system.

Owner-Graduates with access to financial backing may take up the challenge of opening their own food establishments. Often having started out with small fast food or specialty restaurants, many of our graduates own and operate successful food operations.

COURSES:

SEMESTER 1	15 WEEKS
DIM101	Dimensions Hospitality
FTC101	Food Theory
FSQ101	Small Quantity Food
SAN100	Sanitation, Safety and Hygiene
NUT102	Nutrition
MATH110	Business Mathematics
ENG108	Business Communication
EDP105	Elementary Computer Concepts
SERV101	Dining Room Service
ACC103	Accounting
MARK105	Marketing I
PUR101	Kitchen Management

SEMESTER 2	17 WEEKS
FTC102	Food Theory
FSQ102	Small Quantity Food
BKT101	Bake Theory
BK101	Baking
PUR102	Purchasing for Hospitality
FC101	Food and Beverage Control
ENG108	Business Communication
MIX103	Mixology
SERV102	Dining Room Organization
ACC104	Hospitality Accounting Procedures
CWE102	Work Experience

SEMESTER 3	15 WEEKS
FLQ203	Advanced International Cuisine
MARK208	Marketing II
PERS202	Personnel
ACC207	Hospitality Accounting
TECH201	Management Techniques
FFE201	Food Facilities and Blueprint

SEMESTER 4	17 WEEKS
LAW204	Law and Insurance
VIN201	Wines
MARK209	Marketing III
ACCL201	Labour Cost
SERV204	Function Organization
SUN201	Sundry Services
FFE203	Food Facilities Design and Layout
SEC201	Security
MP201	Management Projects
CWE203	Work Experience

HOTEL MANAGEMENT

GBC Code F108 **Starting:** September
Kensington Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, or equivalent. Qualified applicants will attend an orientation session.

BACKGROUND: Credits in bookkeeping and business mathematics would be useful.

ABOUT THE PROGRAM: Highly skilled management is vital to the efficient operation of modern hotels. The hotel industry is a round-the-clock business and it needs young men and women who are prepared to meet the challenges it offers.

The Hotel/Motel Management program gives the student the training to enter this field. Students learn practical skills in the most modern facilities available including fully-equipped bar, food preparation stations, a private, licensed dining lounge and a front desk classroom with individual reception desks. Management techniques are learned with the aid of a computerized model of a hotel operation.

In the well-established, co-operative training program, students spend time with the department heads of world-famous Canadian hotels learning, under expert supervision, what the hotel industry is all about.

CAREER PROSPECTS: Graduates can look forward to a variety of positions within a hotel such as front office, sales, catering, beverage control, accounting, personnel or purchasing as well as the potential for careers in the closely-related food service industry.

JOB DESCRIPTIONS:

Front Office and Reception—The front office processes reservations, registers the guests, assigns rooms, handles complaints and provides information on all hotel services.

Sales—The salesperson visits local and out of town business executives, offering the hotel's guest rooms, banquet halls and seminar rooms for conventions and meetings.

Purchasing—The purchasing agent obtains competitive bids on all items purchased by the hotel, selecting the proper quality for goods purchased and ensuring correct shipping and billing.

Beverage—The Food and Beverage Manager supervises all preparation and service staff, ensuring that all dining rooms and lounges are operating efficiently and profitably while maintaining high standards of food, beverage and service.

Banquets—The Banquet Manager supervises the set up and service of banquets, weddings, receptions, meetings and conventions.

Accounting—The Food and Beverage Controller compiles cost and profit statistics, prices, menus, forecasts business trends and reports to management on cost-saving measures.

COURSES:

SEMESTER 1	15 WEEKS
DIM101	Dimensions Hospitality
FTC101	Food Theory
FSQ101	Small Quantity Food
SAN100	Sanitation, Safety and Hygiene
BKT101	Bake Theory
BK101	Baking
MATH110	Business Mathematics
ENG108	Business Communication
MIX103	Mixology
SERV101	Dining Room Service
ACC103	Accounting
PUR101	Kitchen Management

SEMESTER 2	17 WEEKS
FTC102	Food Theory
FSQ102	Small Quantity Food
NUT102	Nutrition
PUR102	Purchasing for Hospitality
FC101	Food and Beverage Control
ENG108	Business Communication
SERV102	Dining Room Organization
EDP105	Elementary Computer Concepts
ACC104	Hospitality Accounting Procedures
MARK105	Marketing I
CWE102	Work Experience

SEMESTER 3	15 WEEKS
FOP201	Front Desk Procedure
MARK208	Marketing II
PERS202	Personnel
ACC207	Hospitality Accounting
TECH201	Management Techniques
FFE201	Food Facilities and Blueprint
HK201	Housekeeping
SUN201	Sundry Services

SEMESTER 4	17 WEEKS
LAW204	Law and Insurance
VIN201	Wines
FOO202	Front Office Operations
MARK209	Marketing III
ACCL201	Labour Cost
SERV204	Function Organization
FFE203	Food Facilities Design and Layout
SEC201	Security
MP201	Management Projects
CWE203	Work Experience

CHEF TRAINING–PRE–EMPLOYMENT

GBC Code F742
Kensington Campus
2 Semesters

Starting: September and January
Certification: Certificate

PREREQUISITES: Grade 12 or equivalent. Qualified applicants will attend an orientation session.

ABOUT THE PROGRAM: This program provides the complete in-school portion of the apprentice cook certification program. Students will be considered for direct entry into the 3rd semester of the Culinary Management Program.

Nine hundred of the 6,000 hours required for apprenticeship are credited to the graduate who registers as an Apprentice Cook.

The program includes food theory classes covering all aspects of food products and preparation, demonstrations by experienced qualified chefs on how to prepare food items followed by hands-on preparation by students using small and large quantity recipes to produce dishes used by our cafeterias and formal dining room.

These subjects are broadened by study in related areas such as sanitation, nutrition, kitchen management, purchasing and food cost control. These provide a background that a student may use to understand and successfully work in the wide variety of contemporary industry kitchens.

In addition, successful candidates who obtain credits in accounting and computer concepts may gain direct entry into the second year of the Culinary Management Program.

CAREER PROSPECTS: Graduates of this program will find excellent opportunities for employment in all areas of the food service industry, including hotel kitchens, restaurants, institutions, and commercial and industrial catering organizations.

COURSES:

SEMESTER 1	20 WEEKS
BKT701	Bake Theory
BK701	Baking
ENG741	Language and Communications
FSQ701	Small Quantity Food
FLQ701	Large Quantity Food
MATH735	Business Mathematics
MT701	Meat Theory
NUT731	Nutrition
FTC701	Food Theory
PUR705	Kitchen Management
DIM701	Dimensions Hospitality
SAN730	Sanitation and Safety

SEMESTER 2	20 WEEKS
BKT702	Bake Theory
BK702	Bake Practical
FTC702	Food Theory
FSQ702	Small Quantity Food
FLQ702	Large Quantity Food
ACCL701	Labour Control
PUR702	Purchasing
FC703	Food Cost Control
MATH735	Business Mathematics
ENG741	Language and Communications

FOOD PREPARATION–GENERAL–BASIC

GBC Code F573
Kensington Campus
20 Weeks

Starting: Every 20 weeks.
Certification: Certificate

PREREQUISITES: Grade 10 or equivalent and a pre-entrance interview.

ABOUT THE PROGRAM: The program includes food theory classes covering all aspects of food products and preparation demonstrations by experienced qualified chefs on how to prepare food items followed by hands-on preparation by students using small and large quantity recipes to produce dishes used by our cafeterias and formal dining room.

These subjects are broadened by study in related areas such as sanitation, nutrition, kitchen management, purchasing and food cost control. These provide a background that a student may use to understand and successfully work in the wide variety of contemporary industry kitchens.

CAREER PROSPECTS: Graduates of this program will find excellent opportunities for employment in all areas of the food service industry, including hotel kitchens, restaurants, institutions, and commercial and industrial catering organizations.

Students who successfully complete this program may be given direct entry into the advanced level program or enter industry with 450 credit hours granted towards their professional designation as a Journeyman Cook.

COURSES:

20 WEEKS	
BKT501	Bake Theory
BK501	Baking
ENG501	Language and Communications
FSQ501	Small Quantity Food
FLQ501	Large Quantity Food
MATH501	Mathematics
MT501	Meat Theory
NUT501	Nutrition
FTC501	Theory Food
PUR505	Kitchen Management
DIM501	Dimensions Hospitality
SAN500	Sanitation and Safety

FOOD PREPARATION–GENERAL–ADVANCED

GBC Code F574 **Starting:** Every 20 weeks
Kensington Campus **Certification:** Certificate
20 weeks

PREREQUISITES: Grade 10 or equivalent and successful completion of Food Preparation, Basic.

ABOUT THE PROGRAM: This program completes the requirements for the in-school portion of the Journeyman's Certificate. Graduates are urged to enter the industrial training section of the apprenticeship program.

Graduates may be considered for direct entry into the 3rd semester of the culinary management program, if they obtain credits in accounting and computer concepts. Graduates who successfully complete this program may enter industry with 900 hours credit towards their designation as a Journeyman Cook.

CAREER PROSPECTS: Excellent career opportunities are available in hotel restaurants, clubs and institutions as a cook. Candidates can progress to positions of a head cook, chef or kitchen manager.

COURSES:

20 WEEKS

BKT502	Bake Theory
BK502	Bake Practical
FTC502	Food Theory
FSQ502	Small Quantity Food
FLQ502	Large Quantity Food
ACCL502	Labour Cost
PUR502	Purchasing
FC503	Food Cost Control
ENG502	Language and Communications

CHINESE COOKING–BASIC

GBC Code F577 **Starting:** April, May and January
Kensington Campus **Certification:** Certificate
8 Weeks

PREREQUISITES: Grade 8 or equivalent with a pre-entrance interview with a College staff member and Chinese restaurant community representative.

ABOUT THE PROGRAM: This program prepares students for careers as a cook in a Chinese restaurant. It teaches the food preparation, kitchen supervising and theoretical methods to meet the needs of various styles of Chinese cuisine. The student will prepare regional specialties such as Dim Sum, Cantonese cuisine, Szechuan cuisine, barbeque and chop suey style dishes in our Chinese style food laboratory. Each practice session is preceded by a demonstration and discussion of specific methods conducted by a noted expert in that particular field.

CAREER PROSPECTS: Graduates could be employed as third, second, first cook and with experience, chef in a variety of Chinese restaurants. This program is actively supported by the Toronto Chinese Restaurant Association.

COURSES:

8 WEEKS

SAN577	Sanitation	FP536	Chop Suey and Food Preparation
FTF577	Food Theory	FP537	Szechuan Preparation
MENU577	Menu Planning	MATH577	Mathematics
FP534	Cantonese Preparation	ENG577	Communications
FP535	Dim Sum Preparation		

CHINESE COOKING–ADVANCED

GBC Code F578 **Starting:** August and October
Kensington Campus **Certification:** Certificate
8 Weeks

PREREQUISITES: Successful completion of Chinese Cooking–Basic program and work experience.

ABOUT THE PROGRAM: This program continues and elaborates on the skills acquired in the basic program and in the work experience. It reinforces the practical sessions on advanced food preparation by discussion of food storage, purchasing and receiving, recipe costing portion control and yields, human relations, market evaluation, hospitality law and Chinese kitchen layouts.

CAREER PROSPECTS: Graduates could be employed as third, second, first cook and with experience, chef in a variety of Chinese restaurants. This program is actively supported by the Toronto Chinese Restaurant Association.

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COURSES:

8 WEEKS			
SAN578	Sanitation	FP545	Dim Sum Preparation
FTF578	Food Theory	FP548	Barbeque Preparation
PUR578	Kitchen Management	FP549	Chop Suey Preparation
FP544	Cantonese Preparation	FP547	Szechuan Preparation

Baking Techniques

GBC Code F541 **Starting:** Continuous, every eight weeks.
Kensington Campus **Certification:** Certificate
40 Weeks

PREREQUISITES: Grade 10 or equivalent and a pre-entrance interview.

ABOUT THE PROGRAM: The purpose of this program is to prepare students for a career in the Canadian baking industry. This program is segmented in specific eight-week skill sections that include bread craft, pastry craft, cake craft and decorating craft. Each section deals with the practical methods and the theoretical background of a particular specialty. The sections are rounded out with sanitation, nutrition, business communications and mathematics.

CAREER PROSPECTS: This program covers the entire baker apprentice in-school work.

Graduates may become apprentice bakers with 900 hours credit towards their professional certification. Alternatively they make take positions in commercial bakeries, large hotels and institutions, or small bakery shops specializing in one of several specialist aspects of baking.

COURSES:

40 WEEKS	
SAN531	Sanitation Safety
NUT513	Nutrition
MATH511	Mathematics
ENG511	Language and Communications
BKT517	Cake Theory
BK517	Cake Craft
BKT518	Cookie Theory
BK518	Cookie Craft
BKT516	Pastry Theory
BK516	Pastry Craft
BKT515	Bread Theory
BK515	Bread Craft
BKT519	Decorating Theory
BK519	Decorating Craft
BKM510	Ingredient Projects
BKM540	Bakery Management

Food Service and Bartending

GBC Code F576 **Starting:** Every 10 weeks.
Kensington Campus **Certification:** Certificate
2 Semesters

PREREQUISITES: Grade 10 or equivalent and a pre-entrance interview.

ABOUT THE PROGRAM: This twenty-week program integrates the skills of food and beverage service techniques over two ten-week blocks.

The theory and practical hands-on skills of food service are taught in a formal dining room where students are required daily to serve five course meals. Skills are built gradually, moving from the basic to the more complex. Bartending is taught in a modern 22-station mixology laboratory with theory and hands-on practice combined. Sanitation and dimensions of the industry round out Module I. Module II provides introductions to marketing, restaurant accounting procedures, wine appreciation and advanced service such as flambé work and food preparation at the tableside.

CAREER PROSPECTS: A graduate would find positions in table service in large and small restaurants or food service operations from fast food areas to fine formal dining rooms. In addition, the skill of bartending will allow the extra flexibility to obtain a position as a bartender in bars, taverns, discos and clubs.

COURSES:

SEMESTER 1 10 WEEKS	
SAN576	Sanitation and First Aid
DIM576	Dimensions of Hospitality
MIX576	Mixology
SERV576	Dining Room Organization I
SERV577	Basic Dining Room Service I
MATH576	Business Mathematics
ENG576	Business Communications

Co-op Work Experience is offered during the second semester of the program. It will replace two weeks of regular classes on a rotating basis.

SEMESTER 2 10 WEEKS	
LAW576	Hospitality Law
FTF576	Food Theory
MARK576	Marketing and Merchandising
ACC576	Hospitality Accounting Procedures
MIX586	Mixology
VIN576	Wines
SERV586	Dining Room Organization II
SERV587	Dining Room Service II
CWE576	Co-op Work Experience

HOTEL FRONT OFFICE AND RECEPTION

GBC Code F548 **Starting:** January and March
Kensington Campus **Certification:** Certificate
12 Weeks

PREREQUISITES: Grade 10 or equivalent, and a pre-entrance interview.

ABOUT THE PROGRAM: The purpose of this program is to train men and women as front office clerks and receptionists for hotels and motels. In a twelve week program, the student is exposed to the following subjects:

Front Office Procedures—Registration methods, room rates, specialized rates, room assignments and procedures, reservation policies, forecasting, housekeeping and reporting techniques.

Front Office Operations—Billing to the guest's ledger, cash and credit procedures, night audit and reconcilliation of accounts and the city ledger; the physical operation of a variety of front office posting machines and their accounting procedures.

Hotel Law—Including contracts, liabilities and crimes, the Innkeeper's Act.

Personnel—Employee-guest relations, information exchange and public relations tactics.

CAREER PROSPECTS: Graduates could find employment as front desk clerks and receptionists for hotels, motels, resorts of all types. This program can be an entry into the hotel business and a starting point for continuing training in hotel management.

COURSES:

12 WEEKS	
MATH504	Business Mathematics
FOO502	Front Office Operations
FOP501	Front Desk Procedure
ENG543	Communications
LAW501	Law and Franchising
PERS502	Personnel Hospitality
DIM501	Dimensions Hospitality
EDP505	Elementary Computer Concepts
SAN500	Sanitation and Safety
TYP501	Skill Development (Word Processing)

BARTENDING

GBC Code F575 **Starting:** January, April and August
Kensington Campus **Certification:** Certificate
15 Weeks

PREREQUISITES: Ontario Grade 10 or equivalent mature student, [redacted]; neat and clean appearance; pleasant and outgoing personality. Pre-entrance interview required.

ABOUT THE PROGRAM: The purpose of this program is to train men and women as bartenders (stool and service) for licensed establishments in the food and hospitality industry.

Students are trained, in our modern 22-station mixology laboratory, in the art of mixing, building and shaking the most common drinks served in the industry today. They also study the Liquor Licence Act, fire safety procedures, the Innkeeper's Act, personnel relations and various aspects of bar management and accounting.

CAREER PROSPECTS: Graduates could find employment tending a bar in a variety of restaurants, hotels, pubs, discos, taverns, clubs and on a freelance basis for private functions. This position is also used as an entry position leading to food and beverage management.

COURSES:

15 WEEKS	
PERS502	Personnel Hospitality
LAW501	Law and Franchising
MIX503	Mixology
BAR504	Bar Management
BAR505	Bar Accounting
BAR506	Beverage Theory and Wines
ENG501	Language and Communications
MATH501	Mathematics
SAN500	Sanitation and Safety
DIM501	Dimensions Hospitality

RETAIL MEAT CUTTING

GBC Code F544
Kensington Campus
20 Weeks

Starting: On-going admissions at various periods throughout calendar year.

Certification: Certificate

PREREQUISITES: Grade 10 or equivalent. High standards of [redacted] entrance interview.

ABOUT THE PROGRAM: At George Brown College, we have the most complete meat cutting laboratories, staffed by several of the best known meat cutters in the industry.

Working in refrigerated meat laboratories, the student divides his/her activity between industry meat production and private customer orders which account for many thousands of dollars of meat purchases annually. This permits each student to have a comprehensive hands-on work experience which develops his/her speed, accuracy and self confidence before moving into the industry.

The in-school portion of training offers all subjects required for the apprentice meat cutter such as—meat cutting practice, theory of meats, business procedures, business mathematics and written communications.

CAREER PROSPECTS: Professional meat cutters are employed by the following organizations: independent meat stores; chain store meat departments; hotel and restaurant portion control supply houses, and catering organizations.

Graduates of this program, because of their skill and immediate value to an employer, will experience little difficulty in finding an employer of their choice.

COURSES:

20 WEEKS	
ENG539	Language and Communications
MT544	Business Procedure
MATH535	Business Mathematics
MC533	Practical Meat Cutting
MCT533	Trade Theory
SAN500	Sanitation and Safety

PERFORMING ARTS

THEATRE ARTS

GBC Code TH100 **Starting:** September
St. James Campus **Certification:** Diploma
4 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, or equivalent. Qualified applicants will be interviewed and auditioned.

ABOUT THE PROGRAM: The George Brown College Theatre Arts Program offers a vigorously concentrated career-oriented two years of training in the fundamental skills, practicalities, traditions and professionalism needed for the performing arts.

Enrolment is limited, ensuring personal attention to each student. The faculty are all practitioners in the professional theatre, each with their own specialty, and therefore acquainted with current trends in acting, staging, writing, design, etc.

CAREER PROSPECTS: An ever-expanding international market creates a consistent demand for fresh faces and new, young talent in a range of educational, entertainment, and commercial activities. Students should be aware, however, that the field is an extremely competitive one.

COURSES:

SEMESTER 1	15 WEEKS
THEA100	Acting
THEA102	Dance I
THEA103	Movement I
THEA104	Voice I
THEA106	Music I Vocal
THEA108	Costume
THEA109	Make-up

SEMESTER 2	16 WEEKS
THEA101	Acting II
THEA108	Costume
THEA111	Voice and Movement
THEA113	Vocal Music II
THEA115	Dance II

SEMESTER 3	15 WEEKS
THEA200	Acting and Performance
THEA202	TV Technique
THEA203	Dance III
THEA204	Voice and Movement III
THEA205	Radio Technique
THEA207	Professionalism I

SEMESTER 4	16 WEEKS
THEA209	Professionalism II
THEA210	Voice and Movement IV
THEA212	Dance IV
THEA213	Showcase Presentation I
THEA214	Showcase Presentation II

DANCE TRAINING

GBC Code TH101 **Starting:** September
St. James Campus **Certification:** Diploma
6 Semesters

PREREQUISITES: Ontario Secondary School Graduation Diploma with credits in Grades 11 and 12 at or above the general level, or equivalent and be at the advanced ballet level. Qualified applicants are interviewed and auditioned.

ABOUT THE PROGRAM: This two-year diploma program provides advanced-level students with the professional training they need to enter a ballet company. This is accomplished through classroom training in the practice and theory of classical ballet and other dance forms, as well as related subjects.

Students gain experience through frequent participation in performances, lecture/demonstrations and workshops in both original choreography and established repertoire.

CAREER PROSPECTS: The growth in popularity of dance in Canada over the past year has resulted in improved career possibilities. Graduates of the Dance Training Program have been hired by such companies as The National Ballet of Canada, Pacific Ballet Theatre, Ontario Ballet Theatre, Ottawa Dance Theatre, Empire State Ballet and Atlantic Ballet, among others.

OPTIONS: Female Students, Male Students

COURSES:

SEMESTER 1	15 WEEKS
Option 1—Female Students	
DA100	Classical Ballet—Theory
DA101	Classical Ballet—Practical
DA102	Pointe
DA103	Pas De Deux
DA105	Modern
DA107	Repertoire/Rehearsals

SEMESTER 2	15 WEEKS
DA100	Classical Ballet—Theory
DA101	Classical Ballet—Practical
DA102	Pointe
DA103	Pas De Deux
DA105	Modern
DA107	Repertoire/Rehearsals

SEMESTER 3	8 WEEKS
ANAT106	Anatomy
DA100	Classical Ballet—Theory
DA101	Classical Ballet—Practical
DA107	Repertoire/Rehearsals
DA110	Performance
DA111	Acting Fundamentals

SEMESTER 4	15 WEEKS
DA106	Jazz
DA200	Classical Ballet—Theory
DA201	Classical Ballet—Practical
DA202	Pointe
DA203	Pas De Deux
DA207	Rehearsals

SEMESTER 5	15 WEEKS
DA106	Jazz
DA200	Classical Ballet—Theory
DA201	Classical Ballet—Practical
DA202	Pointe
DA203	Pas De Deux
DA207	Rehearsals

SEMESTER 6	8 WEEKS
DA112	Make-up/Stage Craft/ Performance Preparation
DA113	Dance History
DA200	Classical Ballet—Theory
DA201	Classical Ballet—Practical
DA207	Rehearsals
DA210	Performance

continued on the next page

SEMESTER 1	15 WEEKS
Option 2—Male Students	
DA100	Classical Ballet—Theory
DA101	Classical Ballet—Practical
DA103	Pas De Deux
DA105	Modern
DA107	Repertoire/Rehearsals
DA115	Gymnastics/Weight Training

SEMESTER 2	15 WEEKS
DA100	Classical Ballet—Theory
DA101	Classical Ballet—Practical
DA103	Pas De Deux
DA105	Modern
DA107	Repertoire/Rehearsals
DA115	Gymnastics/Weight Training

SEMESTER 3	8 WEEKS
ANAT106	Anatomy
DA100	Classical Ballet—Theory
DA101	Classical Ballet—Practical
DA107	Repertoire/Rehearsals
DA110	Performance
DA111	Acting Fundamentals

SEMESTER 4	15 WEEKS
DA106	Jazz
DA200	Classical Ballet—Theory
DA201	Classical Ballet—Practical
DA203	Pas De Deux
DA207	Rehearsals
DA215	Gymnastics/Weight Training

SEMESTER 5	15 WEEKS
DA106	Jazz
DA200	Classical Ballet—Theory
DA201	Classical Ballet—Practical
DA203	Pas De Deux
DA207	Rehearsals
DA215	Gymnastics/Weight Training

SEMESTER 6	8 WEEKS
DA112	Make-up/Stage Craft/ Performance Preparation
DA113	Dance History
DA200	Classical Ballet—Theory
DA201	Classical Ballet—Practical
DA207	Rehearsals
DA210	Performance

ADDITIONAL SHORT PROGRAMS

English as a Second Language

GBC Code LT540 **Starting:** Weekly
College Street Campus **Certification:** Certificate
1 Semester

ABOUT THE PROGRAM: The aim of this program is to provide adult new Canadians with a level of fluency in English to allow them to obtain appropriate employment.

The program emphasizes oral performance. The development of literacy skills is fostered to the degree relevant to the student's background and goal.

Literacy in English as a Second Language

GBC Code LT542 **Starting:** T.B.A.
College Street Campus **Certification:** Certificate
1 Semester

PREREQUISITES: Lack of literacy. All applicants are to be referred to the College for assessment before being assigned to the program.

ABOUT THE PROGRAM: This program provides the student who is functionally illiterate in his/her native language with a level of literacy and general language skill required to meet minimal survival and maintenance demands. Those with demonstrated ability could enter a regular EASL program at approximately Level 3.

English for Science and High Technology

GBC Code LT541 **Starting:** June, September and January
College Street Campus **Certification:** Certificate
12 Weeks

PREREQUISITES: All applicants must pass an entrance test.

ABOUT THE PROGRAM: This program is intended to provide students, having a reasonably good knowledge of general English, with the opportunity to apply their knowledge to understanding written and spoken English in a scientific and technological context.

COURSES:

12 WEEKS	
ENG582	Listening Comprehension
ENG583	Reading
ENG584	Writing
ENG585	Technical and Professional Communication

Straight Truck Driver

GBC Code ST574 **Starting:** Contact 967-1212, ext. 3206 for dates.
100 Cherry Street **Certification:** Certificate
3 Weeks

PREREQUISITES: Applicants must be at least 18 years of age. When reporting for training they must produce an Ontario Licence Conversion Form with the application portion and the vision screening completed, and a completed Driver's Medical Examination Form for a Class "D" Licence.

Applicants must have driven a car or a small truck for at least one year. Applicants must possess a Chauffeur's Licence, an elementary education and knowledge of operating a standard transmission.

ABOUT THE PROGRAM: In this program students receive training in the safe operation of 5-ton standard commercial vehicles so necessary to enter the field of road transportation.

Training is conducted in a 5-speed transmission, 2-speed axle, straight truck and a ten-speed Fuller Road Ranger Dump Truck. This training, along with some experience in the field operating this type of equipment amounts to the prerequisite to our tractor trailer program.

CAREER PROSPECTS: Initial opportunities are available in the smaller transport and driver service companies. After 6 months to a year's experience, coupled with an acceptable reference, employment can be found in larger companies where higher salaries and advancement opportunities are available. The heart of any transport company are the drivers and vehicles that supply the main service—transportation of goods. It is advisable that the student, after experience in the straight truck, enrol in the tractor-trailer program to become knowledgeable in all modes of transportation in a transport company.

COURSES:

3 WEEKS	
VEH508	Manoeuvring
VEH509	Driving in Traffic
VEH510	Driver Theory
VEH515	Vehicle Inspection

Tractor–Trailer Driver

GBC Code ST575
100 Cherry Street
4 Weeks

Starting: Call 967-1212, ext. 3206 for start dates.
Certification: Certificate

PREREQUISITES: Applicants must be 18 years of age and in possession of an Ontario "D" Licence with a year's experience driving a straight truck equipped with a multi-range manual transmission and a G.V.W. of 11,000 kg. When reporting for training students must produce an Ontario Licence Conversion Form with the application portion and the vision screening completed and a completed Driver's Medical Examination Form for a Class "A" Licence.

ABOUT THE PROGRAM: With modern driving becoming involved and often hazardous, a scientific approach in this field provides drivers with current knowledge in the latest methods of safe and economical operation. A knowledge of air brakes, multi-range transmissions and tachometers will help drivers to maintain total control of the vehicle on the modern high-speed highway.

CAREER PROSPECTS: Initial opportunities are available in the smaller transport and driver service companies. After 6 months to a year's experience, coupled with an acceptable reference, employment can be found in larger companies where more lucrative remuneration and advancement opportunities are available. The heart of the company are the drivers and vehicles that supply the main service, transportation of goods. With this knowledge, advancement to Driver Trainer, Safety Director, or any other levels of management can be attained with further education in this constantly changing field.

COURSES:

4 WEEKS	
VEH511	Driving in Traffic
VEH512	Vehicle Inspection
VEH513	Driver Theory
VEH514	Manoeuvring

Apprenticeship Programs

People qualify to work in a number of skilled trades through apprenticeship rather than regular college programs. Apprenticeship programs involve paid on-the-job training and classroom instruction. Upon successful completion of required courses, and work experience, apprentices become fully-qualified tradespeople.

While George Brown offers the academic portions of some apprenticeship programs, registration must be made through the Apprenticeship Training Branch of the Ontario Ministry of Colleges and Universities.

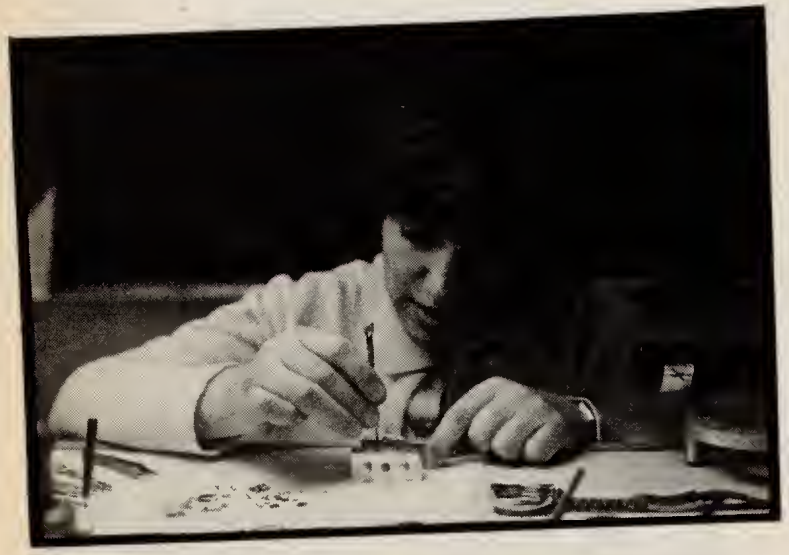
These apprenticeship programs are offered at George Brown:

G.B.C. Program Code	Program Title
F645	Baker 2
F648	Baker – Branch 3 (Patissier)
FT672	Barber Specialty
AR672	Brick and Stone Mason
AR692	Carpenter – General
F646	Cook II
AR690	Drywall and Acoustic Mechanic
EL670	Electrical (Construction and Maintenance)
EN675	Fitter – Structural Steel Platework
AR681	Glazier and Metal Mechanic
AT673	Hairdresser Specialty
FT674	Hair Stylist (Barber)
FT675	Hair Stylist (Hair Dresser)
EL673	Industrial Electronic Controls
EN677	Industrial Mechanic (Millwright)
EN670	Ironworker
AR671	Lather
EN671	Machinist/Machine Trades
EN672	Millwright
AR693	Mobile Crane Operator
EN676	Mouldmaker
AR675	Plumber
EL642	Radio and TV Serviceman
AR676	Refrigeration and Air Conditioning Mechanic
F647	Retail Meat Cutter
AR677	Sheet Metal Worker

continued on the next page

AR685	Sprinkler and Fire Protection Installer
AR678	Steamfitter
EN674	Tool and Die Making
FT680	Watch Repairer

For more information on apprenticeship programs visit or write to the Training Branch office at 558 Yonge St., Toronto, Ont. M4Y 1Z1, or call (416) 965-4211.



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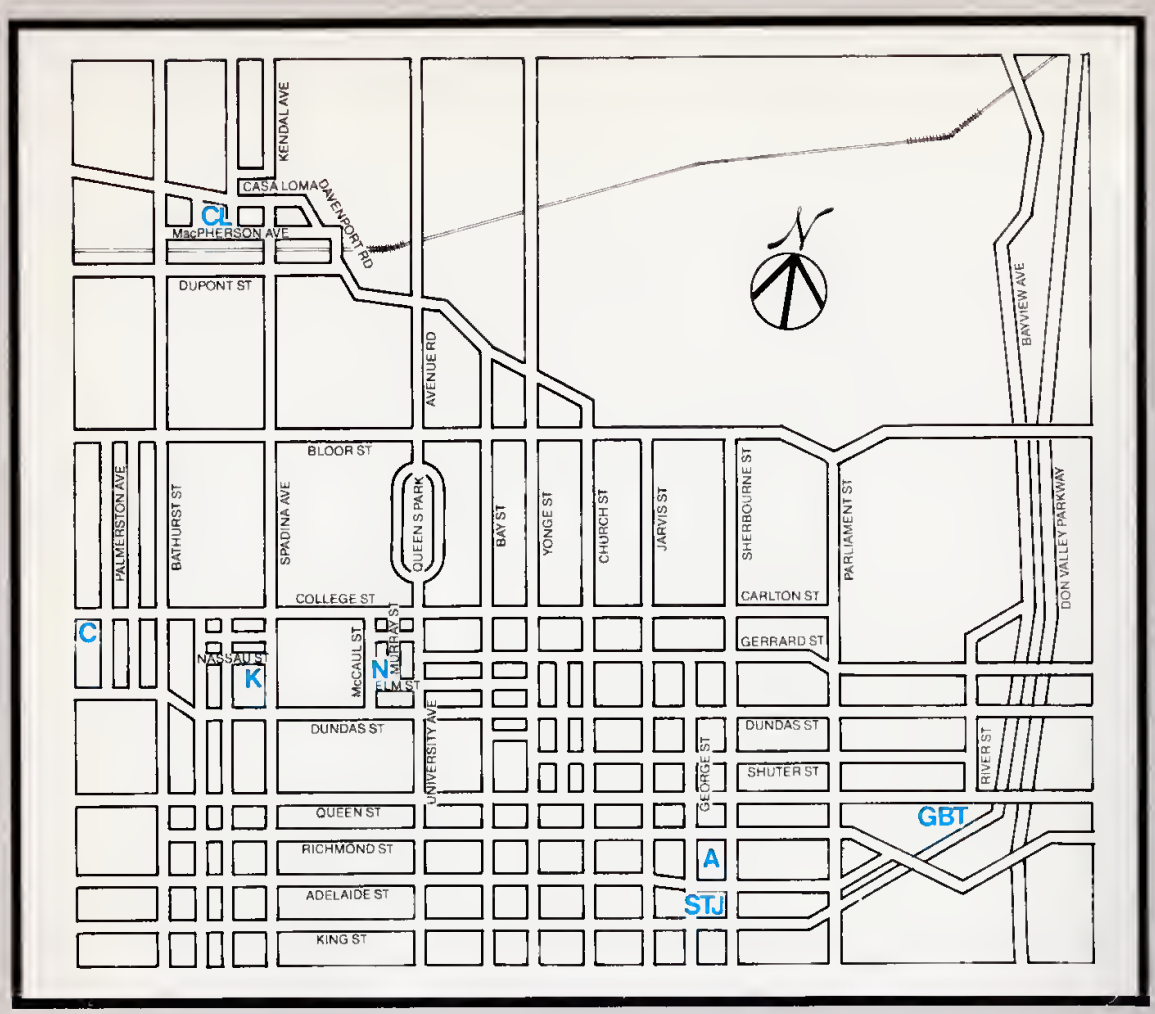

CL—Casa Loma Campus
160 Kendal Avenue

C—College Street Campus
507 College Street

K—Kensington Campus
21 Nassau Street

N—Nightingale Campus
2 Murray Street

A—Adelaide Campus
258 Adelaide Street East

GBT—The George Brown Theatre
530 King Street East

STJ—St. James Campus
200 King Street East

For More Information

This calendar can't give you the whole story on George Brown, and you may still have questions about the College. Our information offices, counsellors, and instructors will be happy to tell you more about our programs and services. Some of our programs have more applicants than available spaces. But George Brown offers such a wide variety of programs that we can help you choose a challenging alternative. Whatever your questions, we'll do our best to give you an answer. Just call (416) 967-1212 and ask for Information Services.

George Brown The City College

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